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MAGNETISM—PART III.

By L. S. Brainerd.

As was stated in a previous paper upon this subject, the law of the magnetic circuit is similar to that of the electric circuit, namely: The magnetic flux is equal to the magneto motive force divided by the reluctance. It will be seen that in the design of magnets the core must be proportioned to carry the flux, or total number of lines of force, just as an electric conductor must be proportioned to carry the current. The size of this core depends largely upon the quality of the iron used, depending, as it does, entirely upon its permeability. For instance, a cast iron magnet must be one and three-quarter times as large as a good wrought iron magnet for the same effect.

The subject of reluctance, or resistance of the circuit to the flow of the lines of force, has not been considered yet in these articles, owing to the fact that it is so complicated that it is impossible to do it justice in so elementary a paper. The calculation of electro magnets is also considerably complicated by magnetic leakage, or the loss of lines of force by their leaking across from one limb of the magnet to the other through the air instead of passing through their armature. The simplest way of reducing this leakage somewhat is to construct the magnet so that the distance from one pole to the other is much greater than twice the distance from the poles to the armature. By making the limbs as short as possible the tendency for the lines to leak across is also reduced as well as the reluctance.

As was stated above, it is not advisable to work the iron of the cores quite up to the saturation point. This means that in wrought iron cores a tractive force of 150 pounds per square inch is the practical limit, while 28 pounds per square inch is the limit in cast iron cores. Having these limits fixed it is a simple matter to find the cross section of the core for any given traction by simply dividing the given load to be

sustained by either one of these numbers.

To calculate the permeability from B: This can only be satisfactorily done by referring to a B and H curve of the iron in question, although for approximate results the following formula may be used for tractions not less than 28 pounds per square inch for wrought



GEO. A. PODELL.

iron, or $2\frac{1}{4}$ pounds per square inch for cast iron.

$$\text{For wrought iron:} \\ \text{Permeability} = \frac{17,000 - B}{3.5}$$

$$\text{For gray cast iron:} \\ \text{Permeability} = \frac{7,000 - B}{3.2}$$

To calculate the total magnetic flux which a core of given sectional area can carry: It has been seen that it is not wise to force more than 100,000 lines

through one square inch of wrought iron, nor more than 42,000 lines through one square inch of cast iron. These figures are the highest that should be assumed in designing magnets. The total flux is found by multiplying the figure thus assumed by the number of square inches sectional area.

To calculate the reluctance of an iron core: To find the reluctance we must first know what B is to be. Then referring to a B and H curve we find what the permeability is. Now, as magnetic reluctance is directly proportional to length and inversely proportional to sectional area, and permeability, we derive the following formula:

$$\text{Reluctance} = \frac{L}{A \times \text{permeability}} \times .3132$$

To calculate the magnetizing force necessary to force a given number of lines of force through a definite magnetic reluctance: Multiply the number representing the magnetic reluctance by the total number of lines of force to be forced through it. The result will be the magneto motive force, or the ampere turner.

To calculate the total magnetic reluctance of a magnetic circuit: This is the sum of all the magnetic reluctances of the several parts of the circuit, consisting of the iron of the cores, the iron armature, and two air gaps. This calculation is, however, complicated by the leakage of the lines of force, which was referred to above. Neglecting this magnetic leakage, however, and letting L_1, L_2, L_3 equal the lengths of the armature, air gaps, and magnet core respectively, and A_1, A_2 and A_3 represent their respective areas, we have as the reluctance of the armature:

$$(1) \frac{R}{A} = \frac{L_1}{A_1 \text{ permeability}_1} \times .3132$$

$$(2) R \text{ air gaps} = 2 \frac{L_2}{A_2 \text{ permeability}_2} \times .3132$$

$$(3) R \text{ core} = \frac{L_3}{A_3 \text{ permeability}_3} \times .3132$$

In formula (2) the permeability of the air gap is 1, and it may, therefore, be written:

$$R \text{ air gaps} = 2 \frac{L_s}{A_s} .3132$$

If there were no leakage the total reluctance would simply be the sum of these three terms, but when there is leakage the total reluctance is reduced.

THE ADVANTAGES OF THE MULTIPOLAR TYPE OF ELECTRIC MACHINERY.

By Wm. Baxter, Jr.

(Concluded.)

The following shows that the three machines are of the same capacity; the difference in the size of the diagrams, which are all made to the same scale, shows the difference in the size and weight of the machines. This comparison does not show the total difference in favor of the multipolar machine; it simply shows the gain where the number of turns of wire on the armature remains the same. As a matter of fact, as the number of poles is increased, the wire on the armature can be increased, and this will make the gain due to the greater number of poles still more. The number of turns of wire that can be placed upon an armature is limited by what is known as "armature reaction," which, in plain English, is the effect that the current in the armature makes to twist around the polarity of the field. The wire D D' on the poles P N in Fig. 1 develops a magnetic force in the direction shown by the dotted lines. The wire on the armature tends to develop a magnetic force at right angles to this, as shown for one pole by the dot and dash lines. As these two forces act in different directions, the result is that the direction of magnetism through the field is diverted from its proper position, and assumes a direction at an angle to it, as shown by the line X X. The angle that this line will make with the line through the center of the poles will depend upon the reacting force of the armature, and this will be proportioned to the number of turns of wire on it. If this angle is very great the brushes will spark badly; therefore, to avoid sparking, the wire on the armature cannot exceed a certain amount. Now, in Fig. 1 all the wire on the armature acts against the field wire, because the whole of it exerts an effort to establish a single pair of magnetic circuits, one of which is shown by the dot and dash line at right angles to the field magnetism. In Fig. 2 only one-half of the armature wire acts against the field, because two pairs of magnetic circuits are developed, one-half of one pair being shown by the dot and dash lines. In Fig. 3, one-quarter of the armature wire acts against the field, because four pairs of magnetic circuits are developed. For these reasons, in Fig. 2 more wire can be placed upon the armature than in Fig. 1, and in Fig. 3 more than in Fig. 2. Hence, the total possible gain by the multipolar construction is greater than the difference in the size of the diagrams would indicate by an amount equal to the extra amount of wire that can be placed upon the armature without increasing the armature reaction.

It may not be made quite clear in the above how in Fig. 1 all the armature wire acts against the field, while in Fig. 2 only one-half acts, and in Fig. 3 only one-quarter; but if the dot and dash

lines in the three diagrams are compared, it will be found that in the first the lower half of the armature is covered by the curve, but in the second and third, only one-quarter and one-eighth, respectively, are covered. To put it plainer, in the first figure half of the armature wire acts against each pole; in the second, one-quarter of the wire acts against each pole, and in the third only one-eighth. In this article the advantage of the multipolar construction has been explained by showing the reduction in size of machines of equal capacity by an increase in the number of poles, because in this way the difference can be presented clearly to the eye, as a comparison of the size

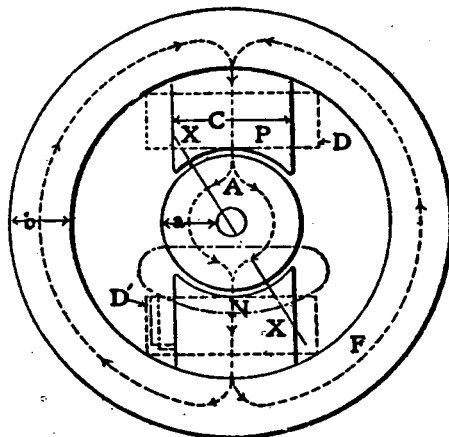


Fig. 1

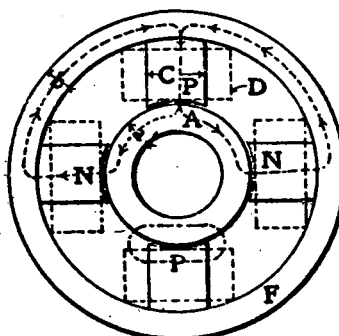


Fig. 2

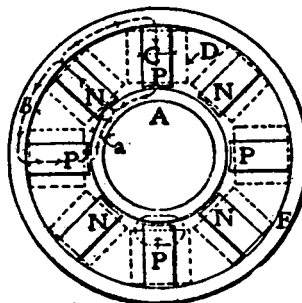


Fig. 3

of the three diagrams, which are drawn to the same scale, at once shows the gain. The subject could have been explained just as well by showing that with machines of the same size the capacity would increase with the number of poles. Such a demonstration, however, could only be made by the aid of calculations, which, although simple,

would not be so clear as the difference in size of diagrams.

The gain effected by increasing the number of poles can be utilized in several ways. If it is desired to maintain the speed the same as with the two-pole machine, the size can be reduced. If it is desired to use a part of the gain to increase the efficiency, this can be done by making the reduction in size somewhat less than shown in the diagrams, in which case some of the wire could be dispensed with. This would reduce the resistance of the machine, and thus increase its efficiency. If it were desired to utilize the gain wholly in obtaining higher efficiency, the result would be accomplished by leaving the size of machine unchanged. In this case, a very large proportion of the wire could be removed, and the reduction in the resistance caused thereby would very materially increase the efficiency.

In practice, the advantage of the multipolar construction is generally made use of to reduce the speed. At the present time, electric generators direct-connected with steam engines, are used very extensively, and for this purpose the multipolar type is always employed. The highest velocity at which steam engines can be run successfully is very slow compared to the speed at which two-pole machines must be driven in order to keep their size, as compared with their capacity, within reasonable limits; but by increasing the number of poles to six, eight or more, the velocity can be reduced to that of the engine without increasing the dimensions of the generator to an unreasonable extent.

For large size machines there is no objection that can be made against the multipolar type, unless it be that, as at present constructed, they have brushes all around the commutator, the number being equal to the number of poles. This increase in number of brushes is undoubtedly an objection, because it increases the difficulty of adjusting them to the non-sparking points, and furthermore, as those on the under side of the commutator are not very accessible, they are much more liable to be neglected. It is not necessary, however, to use so many brushes; a machine with any number of poles can be made with two brushes, by proper connections between the armature wires and the commutator, and in the opinion of the writer the multiplicity of brushes will be discarded before many years go by.

For small machines the multipolar type is not so suitable, owing to the fact that the commutator has to be made very much larger, and even then, in many cases, the connections with the armature wires are so numerous that sufficient space to properly secure them cannot be obtained. Nevertheless, when the electromotive force of the machine is so low that the number of commutator sections can be very considerably reduced, it can be used advantageously even on very small machines.

TESLA'S LATEST PATENTS.

The month of September marked an epoch in the advance of electrical science and placed before us a long stride nearer an artificial or electric light without heat and which is likely to supersede the induction coil as well as the carbon

filament now in use in the incandescent bulbs. Patents Nos. 568,176 to 568,180, inclusive, issued September 22 to Nicola Tesla, the great electrician, demonstrate the method by which he is enabled to produce almost incalculable electrical vibrations.

It was by the use of this advice that Mr. Tesla has been able to demonstrate the scientific possibility of producing brilliant illumination by means of vacuum tubes that were not in mechanical contact with the electric source. Under the influence of a current of electricity interrupted 60,000,000 or 80,000,000 times a second the tubes with which Mr. Tesla was experimenting burst into brilliant white light, which was demonstrated by photography to be much more powerful than the arc electric light, although the tubes were entirely disconnected and stood so far away from the exciting coils that Mr. Tesla sat in a large arm-chair between the tubes and the coil, while he was photographed by the light of the tubes.

No such effect has ever been produced by any other means, and this gives only a rough indication of the ways in which Mr. Tesla's latest patented device may be of use in the arts. For the production of Roentgen rays, the making of ozone and Argon, and for electro-therapeutic treatment, the new device will find immediate use.

The interruption of electrical currents for the purpose of breaking these currents into electrical waves or vibrations has heretofore been a purely mechanical operation. In its simplest form this is done by the commutator or vibrating armature of the Rumpkoff induction coil. The vibrations of such an armature or even of the needle with which the armature has been replaced in some devices, must be confined within the narrow limit of a few hundred to the second. Rotating interrupters, connecting and breaking the electrical circuit, with a change in the position of their teeth as they revolved, added much to the number of interruptions which could be obtained, but even their best speed bore but a pitiful relationship to the 100,000,000 or more vibrations a second which Mr. Tesla calculates that he has obtained from his device. The simplicity of the latter is one of its remarkable features.—New Ideas.

MUNICIPAL LIGHTING IN EDINBURGH.

Cost Far Less Than by the Contract Method—Service Better—Vast Increase to Be Made This Year.

Edinburgh has been trying for many months the experiment of making its own electric light instead of buying it ready made from private corporations. No one who has observed with any care the results of the many similar experiments in other British cities will be at all surprised to learn that this particular plunge into what a few years ago would have been called socialism of the most dangerous sort, has, like almost all of its predecessors, ended in a success at once brilliant and complete.

Already the demand for the city's electric service has grown far beyond the capacity of its original plant, and additions to cost \$105,000 are now in course of erection. Edinburgh not only

illuminates its own streets, but supplies electricity for the lamps and motors of its citizens. The cost of the service is less to a startling extent than it was under the old system, and it is constantly decreasing as the municipal electricians gain experience and confidence. The increased demand is the direct consequence of this reduction in price, and, although the limit of cheapness must be reached sooner or later, it is not yet by any means in sight.

In December of last year Edinburgh's dynamos were forced to work up to their full capacity, and any breakdown would have had serious consequences, as there were no spare machines on which to fall back. Therefore, it was determined to prevent a repetition of this risk by building a new and improved power house sufficiently large to supply from 8,000 to 9,000 horse power. This is now nearly completed, and before the season of greatest consumption arrives the city expects to be able to meet every requisition that may be made upon its plant.

At present the city, besides lighting its own highways, supplies electricity for the equivalent of 70,000 eight candle-power lamps used by private individuals, and it is fully expected that the number will be over 80,000 before the end of the year. The prospects are,

cently the price to consumers was reduced from 6d to 5d per unit, of 16 per cent, and yet there is every reason to believe that next year the financial result to the city will be even better than it has been.—Electrical Journal.

Milwaukee, Wis.—C. D. Wyman severed his connection as the general manager of the Milwaukee Railway and Lighting Company on December 1st, and will go to New Orleans as general manager of the New Orleans Traction Company. Milwaukee can rejoice, but we are sorry for New Orleans.

From present indications it is probable that Milwaukee will build a municipal lighting plant and do its own lighting. The question is now before the Council, and will probably be decided in the affirmative at its next meeting. The estimated cost of the municipal lighting plant is \$345,000. The present contract with the Milwaukee Railway and Lighting Company does not expire until 1900, which would give sufficient time to build the new plant.

S. F. CHESTER'S UNDERGROUND TROLLEY SYSTEM FOR ELECTRIC RAILWAYS.

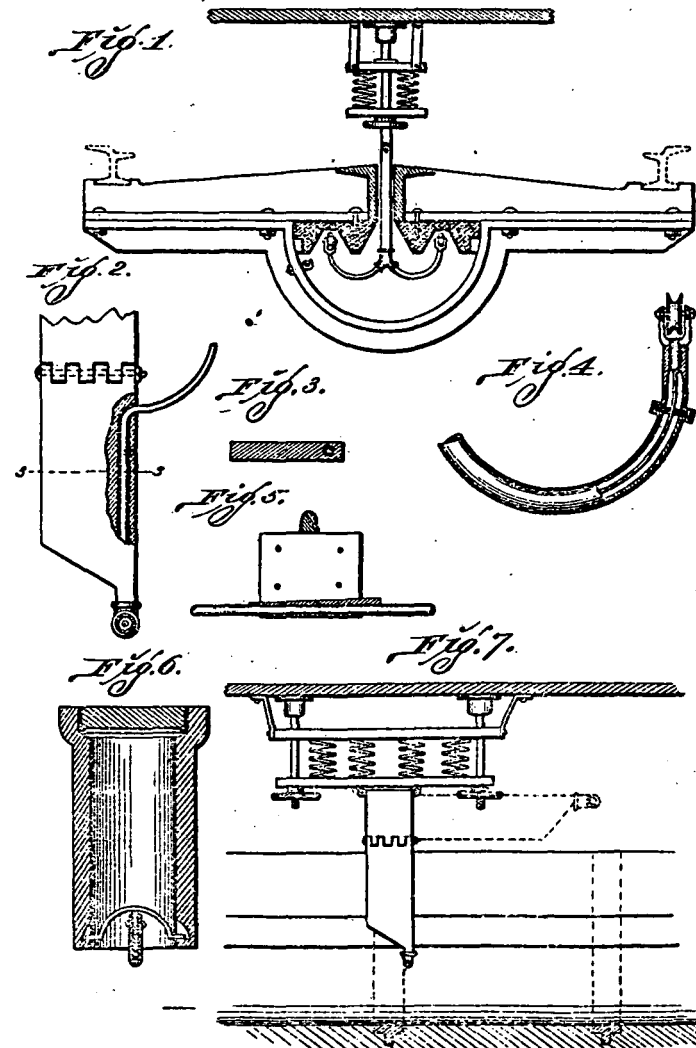


Fig. 1 shows the whole apparatus placed in the conduit, with insulation and iron yokes.

Fig. 2 shows the trolley bar with insulating wire protruding from same.

Fig. 3 shows the section of the trolley bar, looking at the end, with hole for wire.

Fig. 4 shows one arm of the trolley, with wire connections and insulating joint.

Fig. 5 shows trolley wire and hanger, no solder being used.

Fig. 6 shows tiling or insulated armhole, from surface down to the trolley wire, making easy access to trolley.

Fig. 7 shows tension board placed directly underneath the car, with apparatus for adjusting same. Also the trolley bar showing different positions for raising and lowering from conduit.

therefore, extremely promising, especially when one remembers that the undertaking is still in its second year. Re-

The small hook shown in Fig. 1, left hand side of conduit, is an insulating hook for feed wire.



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AS THE ELECTRICAL WORKER reaches the men
who do the work and recommend or order the
material, its value as an advertising medium can
be readily appreciated.

St. Louis, Mo., December, 1896.

W. N. GATES, SPECIAL ADVERTISING AGENT,
29 Euclid Avenue, CLEVELAND, OHIO.



The first murderer to be electrocuted
in Ohio under the new law which sub-
stitutes the electric chair for the gal-
lows, is Willie Haas, a 16-year-old boy,
who murdered Mrs. Brader, the wife of
a gardener, last July.

The American Agents' Association, an
international union of canvassing agents
affiliated with the American Federation
of Labor, is waging war against the
Metropolitan Life Insurance Company of
New York, whose principal business is
insuring children on the five-cent-a-week
plan. A recent circular issued by the
Canvassing Association, calling atten-
tion to the abuse, if not slavery, endured
by the canvassers of this company, has
been indorsed by the A. F. of L.

As could be expected, the bankers of
New York furnished one of the most
important cues for Grover's message. At
a meeting in November, they demanded
the retirement of the greenbacks and
the turning of our entire currency cir-
culation over to the banks, and of course
Mr. Cleveland recommends such course
in his message. The American people
have been demanding for more than a
year that he recognize the Cuban pa-
triot as belligerents, but what the peo-

ple demand never concerned the pres-
ent administration very much.

At the request of the Amalgamated
Association of Street Railway Employees
the A. F. of L. has issued an appeal for
aid for the street railway employees of
Milwaukee, who went on a strike last
May (a full account of which was pub-
lished in the JUNE WORKER), and who
have been blacklisted by the Milwaukee
Street Railway Company. This is the
company of which Henry C. Payne,
Mark Hanna's right bower in the late
campaign, and who will probably have
a place in McKinley's Cabinet, is Vice-
President and controlling power, and
whom the Chicago labor skates tried to
whitewash, but made such a poor job
of it that they have lost their reputa-
tions as calciminers.

This month we introduce two new
Press Secretaries. The Press Secretary
from the Tri-City Union will try and
do his duty, and our scribe in Butte,
Mont., judging from his first letter, will
ably represent the electrical workers of
the future great. We hope in the near
future he will be ably assisted by Press
Secretaries in Helena, Anaconda and
Great Falls. Six of our recently organ-
ized Unions are represented in the
WORKER this month, while the Press
Secretaries in a number of our old
Unions seem to have fallen into "innoc-
uous desuetude." We will hear from
the scribe in Syracuse next month, as a
charter has just been granted, and prob-
ably also from Fargo, N. D., and Lan-
sing, Mich. The gospel of trade union-
ism is spreading among the electrical
workers. Each member should take a
personal interest and try to push the
good work on. This is particularly true
of our traveling members. They should
consider themselves organizers, and
when they strike a city where there is
no Union, try to organize one, or at least
send the names and addresses of as
many electrical workers as they can se-
cure to the General Office, where the
switches will be manipulated, the
search lights turned on, and the current
of enlightenment and fraternity applied
to their minds and hearts.

If workmen would think as much
about organizing and the benefits of an
organization when work is good and con-
ditions of working fair, as they do when
wages are reduced and unjust conditions
imposed, there would be no danger either
of a reduction or of the arbitrary con-
ditions frequently imposed. "In time
of peace prepare for war" has been the
motto of statesmen in all ages, yet few
who are fighting the battle of life apply
this to themselves until the battle is on
and they have no time to prepare. We
have scarcely ever known a case where
workmen have voluntarily organized un-
til wages were reduced or notice of a
reduction served, or just as bad, when
they think wages are too low, and or-
ganize with the intention of going on
a strike. It is needless to say that a
Union organized under such conditions
is a failure and better had never been
organized. The unorganized or poorly
organized are like a mob, while the well
organized may be compared to a body of
regulars. At the first few shots the
mob is panic-stricken, and scatter, while

the fire on the regulars only causes them
to close up their ranks and make a more
determined stand.

Our Unions are not organized for
strikes, but rather to prevent strikes.
A trade that is well organized has few
strikes. The well organized workmen
have the respect of their employers and
when any difficulty or disagreement
arises it is usually settled by conferences
or arbitration, while the poorly organ-
ized are treated as though they had no
rights. Had the electrical workers in
our large factories organized when
wages were good and working condi-
tions fair, they would not be in the pit-
iful condition they are to-day, when it
will take years of hard work to reclaim
what they have lost, and it cannot be
accomplished by a strike, and the quick-
er those who think so disimbuie their
minds of this, the better it will be for
them.

A London dispatch from Odessa, Rus-
sia, states that an electrician of that
place has discovered an improvement in
the telephone, by the use of which dis-
tance has no effect upon the hearing,
and he may be able to telephone across
the Atlantic. It is stated the inventor
will proceed to London to experiment
with his invention on the Atlantic ca-
bles between that city and New York.
The greatest electricians heretofore have
declared that telephoning through long
submarine cables was impossible on ac-
count of self-induction, the electrification
of the gutta percha insulation, and also
from stray currents from other sources,
but the electricians may have been mis-
taken in this, as in a number of other
instances, and should not be too dog-
matic about what can and what cannot
be accomplished.

The Postal Telegraph Company and
the Commercial Cable Company have re-
cently formed a close business arrange-
ment which amounts to almost a consol-
idation. The capital of the Postal is
\$15,000,000, and the Commercial Cable
\$10,000,000, and as the stock of each
company is held by practically the same
interest, the new arrangement will make
very little change in either company.

The Postal has been making consid-
erable progress recently, having just com-
pleted its new cable line to Hayti from
New York, which will give it direct con-
nection with the West Indies and South
America. It is also rapidly extending
its lines in Texas and at other points,
and has opened over three hundred new
offices during the past year. It may also
be added that nearly all linemen work-
ing for the Postal are Brotherhood men.

Contracts have been let for the erec-
tion of a new car repair house at Key-
ser, W. Va., for the B. & O. R. R. The
structure will be 80x420 feet and will
cost about \$10,000.

Who Knows Him?

William Wiseman, electric lineman,
will learn something to his advantage
and benefit by communicating with or
calling upon Sheridan S. Norton, 261
Broadway, New York; and five dollars
(\$5) will be paid to the person supplying
the correct address of the above named
lineman to Mr. Norton.

BATTLES AND SHAM BATTLES.

Recently, at a public gathering a man who, although a member of his trade organization having little knowledge of the trade union movement, and less faith in its efficiency to either protect or advance the interests of the wage-worker, committed as he is to a school of economics which believes that the condition of the wage-earner must become much worse before it can at all improve, declared that one of our foremost international unions was backward because it refused to declare its allegiance to his peculiar mode of reasoning and his more peculiar fantasy. The fact that the trade to which he belongs is comparatively unorganized; that the prevailing wages in the trade are of the lowest; that the conditions of labor are the poorest, seemed to have no other effect upon his mind than the one that trade unions, as he said in his patronizing way, "They are all very good, but they could not be of substantial benefit to the laborer, anyhow." The truth of the matter is, that a number of men like the one referred to have given more attention and adhesion to a particular school of philosophy, a theory that apparently struggles for an end, without recognizing that the struggle of labor is on; that that struggle is the one of to-day, and that they who band themselves together best to meet present conditions are those who benefit most by their combined efforts, and at the same time place themselves in a more advanced position to contend for the full rights to which labor is entitled.

These are lost sight of by men who are mentally blinded to our economic and social environments, and who believe the better policy is to struggle for the shadow, even though the substance is lost.

The terms radical and conservative, generally used, are at best relative. Some may imagine that to declare for an ultimatum, an entire solution of the problem of life, of our economic surroundings, our social conditions, is the wisest; but few will deny that while, never losing sight of the goal to be achieved, the workers who band themselves together to obtain more of the results of their labor to-day; who deal with the conditions as they exist, and bear the brunt of battle of the present to secure greater advantages for their fellow-craftsmen, their fellow-workers, are those who steadily plod and plod on, gaining concessions from the capitalist class day by day, making them sturdier in battle, more self-respecting, more self-reliant, keeping abreast with the ever changing economic conditions. These are the workers who do the real battle in the struggle for economic, social and political emancipation.

One can very easily detect the comparative strength or weakness of a trade union by the mouthings (sometimes called declarations of principles) of organizations. Those which are strongest, both numerically and financially; those who have made the greatest advances, are the most careful in their utterances; their expressions, their declarations; while those which are most weak, make up for their own impotence, their own lack of sterling qualities, their own deficiencies or negligence in the work of organization, by the so-called radical dec-

larations of purposes, and their continuous gropings in the dark for the chimerical.

Work on! work on! as workers to organize the unions of our respective crafts, trades and callings. Organize the unorganized; bring them within the fold; make the unions what they should be to the workers—the steadfast friends, advocates, defenders in all the emergencies of life, whether it be in a conflict with an employer or with the employing classes of all fields of action, or whether it be to allay the havoc among our fellow toilers resulting from false economic conditions.

Pay dues into the union, high dues. Impress upon the workers that by organization upon clear cut lines we shall gather strength, influence and power, day by day, in the same measure that we devote our study and energy undividedly and faithfully toward the organization of the toilers in their trade unions.

The organization of the wage-workers on other than trade union lines and other than trade union effort is a diversion and diffusion of effort; it is the sham battle of labor, while that of the trade union forms the grand army of labor, which bears the brunt of all the workers' battles now and will bear them in the days to come.—American Federationist.

ARBITRATION AND COMPULSION.

The failure of the effort to arbitrate the dockmen's and lightermen's strike at Hamburg is the effect of a cause that will prevent arbitration of all such disputes until arbitration is made compulsory.

Compulsory arbitration does not mean that findings of the arbitration board shall be binding upon either party. The chief value of an arbitration board, in this country at least, must be that of a court of record in which all the evidence can be taken, the causes of difference set out, and an unbiased statement of the case had. Under such a showing public opinion would be able to reach a right conclusion and that conclusion once reached, neither party to the dispute could afford to long stand out against it.

One reason why labor is more friendly than capital to arbitration is that, without it, the first public inconvenience resulting from a strike leads to public indignation against the immediate cause of that inconvenience which is, naturally and inevitably, the workingman, either resisting a reduction of wages or insisting upon better wages than he is getting.

What labor needs is a speedy means of getting the issue and the evidence in such controversies before the people. Arbitration boards meet this necessity. Make arbitration compulsory and public opinion will do the rest.—St. Louis Post-Dispatch.

A Fast Ride.

A day or two ago Mr. Henry P. Janes, of Baltimore, rode from Baltimore to Philadelphia on one of the locomotives attached to a Royal Blue train. Mr. Janes has had some experience in locomotive riding, and he writes to General Superintendent Fitzgerald that he had ridden on an English locomotive sixty miles in 60 minutes, but the Royal Blue

Flyer beat even that, as he went one mile in 45 seconds and several consecutive miles in 50 seconds each. He was astonished to see with what little steam the great speed was made and the heavy train drawn. In running, the engineer had his throttle scarcely one-third open on 150 pounds of steam. The engine upon which Mr. Janes rode was one of the new ten wheelers built after the designs of Harvey Middleton, General Superintendent of Motive Power of the B. & O.

Traveling men all over the country are rejoicing over the fact that the opposition to the issuing of an interchangeable 5,000 mile book has been removed. At the last meeting of the Central Passenger Committee, held in Chicago, the Pennsylvania Line withdrew their objections to the book. After a few minor details are arranged, the book will be placed on the market. Both C. O. Scull, of the B. & O., and McCormick, of the Big Four, feel quite jubilant over the victory. They have been steadfast friends of the 5,000 mile book and have kept the movement agitated until success came.

Bro. W. B. Martyne reports trouble at Jasper, Ind., and requests linemen to stay away.

IN MEMORIAM.

The following is a copy of resolutions adopted by No. 36, N. B. E. W. of A., Sacramento, Cal.:

Whereas, Death has claimed our beloved brother, Thomas Lannon; and

Whereas, Submitting humbly to the inevitable, we feel the most heartfelt regret for our loss; therefore, be it

Resolved, That we drape our charter in mourning for thirty days, and that a copy of these resolutions be spread on the minutes of the meeting of Union No. 36; a copy to be sent to the relatives of our deceased brother, and also a copy be sent to the "Electrical Worker" for publication.

R. A. FISK,
Rec. Sec'y.

UNION NO. 6.

We, your committee appointed to draft resolutions on the death of our lamented brother, Thomas Lannon of Sacramento, Cal., beg leave to submit the following:

Whereas, By a misfortune most deplorable and unexpected, while performing his duty, the Supreme Ruler of the Universe has called from our midst Bro. Thomas Lannon of Local No. 36; and

Whereas, The intimate relations long held by our deceased brother with the members of this Local render it proper that we should place on record our appreciation of his services as an electrical worker and his merits as a man and true citizen; therefore, be it

Resolved, That we express our sincere sympathy with the bereaved relatives, and Local No. 36, and commend them to Him who doeth all things well; be it further

Resolved, That a copy of these resolutions be sent to Local No. 36 of Sacramento, and that they be spread on our records, and a copy be sent to the "Electrical Worker" for publication.

A. F. IRWIN,
GEO. P. MANNING,
D. KEEFE.

FROM OUR UNIONS.

ST. LOUIS NOTES.

As the Press Secretary of No. 1 has fallen by the wayside, a few lines from a member may not be out of place.

Work in this city is strictly on the "bum," and during the past few months we have had more members out of work than ever before in our history. The "promised prosperity" must have got sidetracked long before reaching St. Louis. This is very discouraging, considering the fact that the promise originated in St. Louis.

Work on the new City Hall is at a standstill. We are not informed why. It may be that E. G. Bruckman (the electrical contractor) got scared at the formidable committee of No. 1 that recently waited on him. The committee simply asked that our agreement with Mr. Bruckman be lived up to, and if he does there will be no trouble, as far as the electrical workers are concerned, on the City Hall.

Work on the Century Building is also taking a rest. Scarcity of money is the cause. This was given as an excuse before election. Since election we have not learned what the excuse is. The Western Electric has the contract, and gave work to quite a number of our members until the theater part was finished. It is to be hoped for the sake of suffering humanity (if wiremen are included in this), that work will not be delayed any longer. Liggett & Myers have not yet started to wire their new tobacco factory, and several other large contracts which it was expected would be wired this fall, are all at a standstill.

If we were to judge by the number of new companies in the field (on paper), there ought to be work enough in this city for half the electrical workers in the United States. Yesterday eighteen companies filed applications for conduits under the Keyes ordinance, and "there are others." We only recognize three as having familiar names.

The Board of Public Improvements has partially abandoned its exclusively incandescent lighting scheme, and will advertise for three bids: One for arc, one for incandescent, and a third for a combination of arc and incandescent. The period of twenty years has not been changed. Now if the bids were for five, ten, and twenty years, so that we could see what difference a long contract makes in price, the citizens would be better satisfied. Public opinion forced the Board to recede from its first position of incandescent lighting, and should now be directed on the time limit of the contract.

The Edison Company has been laying off men at each pay for several months; laying off as many as thirty-nine men at one time. The Laclede has succeeded in keeping its regular force busy. All men working for the Laclede Company are Union men. The Telephone Company has been laying off men also, and is working a number of men below our scale. The Union scale for journeymen in this city, both for linemen and inside wiremen, is \$2.50 per day, and \$3 for foremen. Yet there are foremen at the Telephone Company receiving only \$2.25 per day, while some of the men in their

gangs are receiving \$2.50. We have recently been informed that there are men at the Telephone Company working for as low as \$1.75 per day. It is needless to add that there are but few Union men working for the Telephone Company, and the high-priced men are being gradually replaced by cheaper men. When all the Telephone men were in the Union, \$2.50 per day was universal with the company. It requires a brick house to fall on some men before they can take a tumble. The Postal and Western Union are working their usual forces.

No. 1 has a committee at work negotiating agreement with the Gas Fitters on conduit and fixture work. The basis of the agreement, which will be signed shortly, will be that wiremen shall concede to gas fitters the right to do all electrical fixture work, and the gas fitters in return will not do any iron armored conduit work, or put up switches or drop lights. Both Unions will work in harmony and do their utmost to make all shops and jobs strictly Union.

The committee appointed some time ago to negotiate a contract with the Electrical Exchange (the Electrical Contractors' Association) has drawn up an agreement which has been approved by the Union and is ready to be submitted to the Exchange. We do not anticipate much trouble in having it signed. The contract will cover wages, hours of work, working rules, and provides for an examining board to examine all wiremen and give them their rating. It also provides that the Exchange shall hire none but Union men, and members of the Union shall not work for any contractor unless he is a member of the Exchange. Members of the Union, under this contract, will not be allowed to do any contracting. When the agreement is signed, we will publish it in full in the WORKER, as it may contain some valuable pointers for other Unions.

Union No. 1 gave its seventh annual ball on December 5th, 1896. This, as all previous ventures of No. 1 in the social world, was a brilliant success. If we did not have so many members out of work, our ball would be more of a financial success, but notwithstanding this we will clear about \$100.

The reading room, which we opened October 1st at 118 North Eighth street, has been well patronized. The expense of maintaining the room is only \$15 per month, and is about one of the best investments No. 1 has ever made.

A MEMBER OF NO. 1.

UNION NO. 6, SAN FRANCISCO, CAL.

In reading over the correspondence of various locals in the October "Worker," I find, according to the directory of local unions, only about one-half present. Where is the other half? Have the Press Secretaries gone fishing down to Buzzard Bay, or has one of the Eastern cyclones struck the continent and blown them off the face of the earth? If they are still here, let us hear from them. I believe that the "Electrical Worker" is to our order what oil is to the bearings of machinery. Without having the bearings of our engine well oiled, she can run but a short time, until they become hot and "freeze." Then steam itself is

powerless; so is this order—great though it is, without its "Worker" it cannot exist. There are enough locals connected with this order to make the "Electrical Worker" the greatest journal that has ever been published in the United States by any labor organization, so, brother secretaries, let us see what we can do. Without energy we can accomplish nothing, and it is not a hard task to write six letters in six months. Some Press Secretary imagines, perhaps, that he is not capable to fill that position. Show me a lineman or a wireman who has not the intelligence to write the workings of a local once a month, and I will show you a man who is not fit to be a lineman or a wireman, unless he has a guardian appointed to watch over him that he may not come to harm. Bro. McMenee of No. 67 says there are some good writers for the "Journal." I agree with him. Bro. Henry Hatt's letter in October "Worker" on the silver question shows his sterling ability as a writer. I am against the subject, but admire the writer.

No. 6 has been doing splendid work in the last month. We opened the charter for thirty days, at a reduced initiation fee. It increased the membership about twenty-five, so No. 6 has on its roll the best men working at the business in San Francisco to-day. There are a few yet who have not taken advantage of the opportunity that has been extended to them, but perhaps when the initiation is doubled, they may see we are somebody and conclude to be made one of us. We are only two years old, and if the next two will give us the same prosperity, I don't think there is a member who will have cause to be sorry he has his name enrolled on our books. No. 6 feels proud of William McFarlane, one of our new members. He is general foreman for the Edison Light and Power Co., which position he has held for four years. He has the qualities which make him a man well fitted for that position. He has the true friendship of his men, as they have found him their friend. Such are the men that bring power to our union.

Jos. Thieman, who has been down in Redland, Cal., running a plant for the last three years, met with a serious accident some time ago in going up a pole. He had to pass between the two wires of an alternating circuit, and in doing so short-circuited himself, each wire touching him on the arm a little below the shoulder, and burning clear to the bone. He had to have both arms amputated at the shoulder, and has almost recovered. Twenty-five hundred volts passed through his body. He formerly lived in this city.

The Telephone Co. has for some reason discharged nearly all their men. The curious part is that they have a great deal of work to do, and those that are out are the oldest and most reliable men the company had. The local feels very sorry, as they are all members of the brotherhood. A new telephone company got a franchise from the city a few days ago, and expects to begin operations as soon as possible. The agreement reads that \$100,000 must be spent the first year, so we hope to see the boys on top in a short time. We have a new electric light company, known as the Commercial Light and Power Co. It will be an underground system and has

laid several blocks of pipe, and if present action can be used for future reference, it certainly means business. The Edison Light and Power Co. is making quite an extension to their three-wire system. It is the straight Edison low-tension underground, but on account of the heavy expense of laying the feeders underground, they are now running them overhead at less expense, and can give a great deal better service, as they can cross-connect, and keep the voltage more even. The last report from the brothers over at Union Iron Works was that Rush and Forrest were working night and day to get all the search lights on Uncle Sam's warships in good condition, because they are going over to Spain to do some scalping.

No. 6 has a committee out working for its annual ball. We prophecy a great success, and extend an invitation and hearty welcome through our journal to everyone who wishes to trip the light fantastic under the soft rays of various colored incandescent lights. It will take place on the 6th of February. Don't forget the admission fee. No dead heads.

A. C. JOHNSON,
Press Secretary.

UNION NO. 9, CHICAGO, ILL.

As election is over, and having so much prosperity to contend with, we could write enough prosperity to fill the journal. But we find the prosperity much like the country we used to read of: It is always farther west or in some unknown world. The prosperity we have is just the same as before election. Most of the linemen in Chicago are still out of work and watching daily for McKinley to push that button that is going to make the wheels of commerce roll so that we may keep the wolf from the door. I tell you frankly, the wolf is but a few feet from some of our doors, and it is but a short time till it will take the battleship Texas to keep him out. But we who expected nothing better should McKinley be elected are not so much disappointed at the condition of the times.

No. 9 will give a ball at Trades Union Hall, 146 West Madison street, Saturday evening, December 12th, and we expect a grand time. The brothers are enthusiastic in anything they undertake, and I venture to say they will make a grand success of this, and I hope they will increase their treasury by several hundred dollars. If any of the brothers from other cities happen this way at that time, we will show them how the boys of No. 9 can trip the light fantastic. But right here I will say, if they intend coming to Chicago looking for work, to keep away, as there is nothing doing here, with very little prospect in the near future. The telephone company put on about fifteen men in the past two weeks. They are talking of putting on a few more, but don't know how soon they will do so.

We had with us at our meeting last evening Bro. Henry Hatt, or "Silver" Hatt, as our journal calls him. I tell you, brothers, we have with us two "Silver" Hatts—Bros. Henry and Charlie—and they are as true to the silver cause as they are to their Union cause, and all the brothers who know them know they are staunch Union men, true to Union principles and to their fellow-men, when-

ever or wherever you may meet them. We have not received the Journal yet, but I presume election has detained the publication. We will hope to get it by next meeting.

I notice a brother makes objection to our editor giving his views on politics in the editorials of our journal. I do not agree with the brother in that. I think any man has a right to express himself at any time and in any place. This is a free country, supposed to be, although I can't say that all people have that freedom, as the late campaign has proved. It is a sad state of affairs in this grandest country that ever the sun shone on when a man can't vote as his conscience dictates for fear of losing his job, if he has one. I hear someone over there say such is not the case. Some of us have had that sad experience here in Chicago. But a corporation that tried such a game on me would find two votes against it at least, if it was in my power to give them, and thanks to organized labor, they have, through their efforts, given us the Australian ballot box, where no one but the Almighty know how we vote.

To close, I will give you a little prosperity and sound money. The C., M. & St. P. on November 12th laid off in Chicago 646 men, and the men say "We were deceived." That is sound money and prosperity. On November 13th the C., B. & Q. laid off 424 men in Chicago. That is prosperity and sound money. On November 14th, in Chicago, the Chicago and Alton laid off 242 men and cut the rest of their men 10 and 20 per cent. That is sound money and prosperity, with a little confidence mixed in, and the men say "We were deceived." I for one hope they will keep on deceiving them just that way. It will teach them better four years from now, perhaps, although I feel sorry for them at times, and for their families, who have to suffer most; but they had a chance to better their condition and would not accept it.

A. McF., Press Secretary.

HANNA'S PROSPERITY HAS NOT REACHED CHICAGO YET.

The election is over and the silver forces have lost temporarily, but no cause like this will ever die, and consequently we are stronger now than ever. When one stops to consider the great odds that were against Bryan, he virtually won a great victory. The forces that were against him were, a subsidized press, the Republican party, the Grover Cleveland Democrats, and the total money power of this and the Old World—every corporation known to the human race—and still two ordinary States more would have placed him in the presidential chair. The moneyed class and the extreme poor and ignorant were the ones that elected McKinley. The better classes, or middle classes, are the ones that voted for Mr. Bryan. The large manufacturers coerced their employees to such an extent that it made it almost impossible for the men to exercise their own judgment in voting even under the Australian system, and when a man becomes so pauperized that his cowardice predominates, that man is a dangerous foe to any republican form of government. It will be impossible for McKinley to prove to the people of this nation

that the St. Louis platform is a success, and consequently the overthrow of the Republican party will follow, and then the better classes of society will rule. Then these United States will be the home of Americans. Until that time shall arrive, you may expect to jump high, look wise, and keep your back bent, but don't say anything. If you have to eat crow, just eat it, but when our time comes, just watch the other fellow eat crow.

I am satisfied that Altgeld got the entire organized labor vote of Illinois, but the past panics have broken up nearly all the organizations of this State, consequently the scabs voted for Tanner, and outnumbered the organized voters. These are facts, as Altgeld ran nearly 37,000 ahead of Tanner in this city, and was the only Governor Illinois ever had for the producing classes. But this shows what such men as Mark Hanna are. He has wrecked several labor unions himself, and I can't quite see how any man can work for a living and then vote for him and expect to exist. However, by the time the next convention is called the laborers, if not starved to death, will be starved sufficient to know which ticket to vote, as the average laborers cannot exist on confidence.

The prosperity that was going to take place after the "McHanna" election fails to materialize, as far as Chicago is concerned. Instead of starting up factories and other works they are laying off men here by the hundreds, although the subsidized press gives reports to the contrary, and if prosperity does not take effect here, why should it in other places?

The prospects are that this will be a hard winter in the electrical business, and it would be well to prepare ourselves for it.

G. D. HATT.

AFTER THE BATTLE.

In the political battle that has just been fought Mark Hanna and Maj. McKinley remind me of an instance that occurred when I was a boy, between a Presbyterian preacher and a calf. In the first place, less than a year ago, McKinley was in favor of the free and unlimited coinage of silver at the ratio of 16 to 1, and for some time prior to that he expressed himself as being in favor of free silver, and when Mark Hanna interviewed him with the intention of putting him before the public as a possible nominee for the Presidency, finding the Major rather obstinate, knowing that the people knew how he stood on the financial question, Mark was provoked at the Major. He then fastened that gold chain of \$120,000 the Major owed him around the Major's neck, and grabbed him by both ears and said: "If it were not for the respect I have for the laboring people throughout the country (nit) and the love for the almighty gold dollar, I would pull your political head off." The Major wilted at once, and came over to Mark. A preacher had at his home a calf only three days old, which he was trying to learn to drink milk out of a bucket. Sunday morning, as the preacher got ready for church to tell his congregation the ways of the transgressor is hard, etc., his good wife, spying the pan of milk on the kitchen stove which she had been warming for the calf's break-

fast, called her husband's attention to it, stating to him that he had not yet fed the calf. Well, he said, I can feed him now. Being near church time, he did not have time to change his clothes, so he took the bucket, went to the barn, got the calf, put its head in the bucket, placed his hand over its nose, and put his finger in its mouth. Mr. Calf went on drinking nicely. The preacher quietly slipped his finger out of its mouth. Shortly the calf missed the finger, and, chuck, went its head, splashing the milk all over the preacher's clothes. The preacher at once lost his patience; also forgot his religion, grabbed the calf by the ears, chucked its head into the bucket several times, saying: "If it was not for the respect I have for the Sabbath and love for the Saviour, I would knock your d— head off." Now, that is about the way Mark Hanna handled Major McKinley. If someone took about two-thirds of the laboring people and shook them till they had a chill he might wake them to the idea of joining hands and trying to better their condition, as well as that of their fellow-man. The campaign that has just closed shows how little they think of the condition of their fellow-men; how little they think of the many poor men in these large cities, who commit suicide every day because they can't find employment to support themselves and their families; how little they think of the poor wives and little children that are starving for something to eat, and freezing for the want of fuel to keep them warm, because their husbands, their fathers, or their brothers can't find employment to support them. Selfishness is one great cause of such misery. I heard several men remark before election, "I have a job, and if I vote for Bryan I will lose my job; I must look out for myself." That is the trouble; we think too much of self. Why not think of the misery of others while we are enjoying a small portion of comfort, for it is but a very small portion we have to enjoy. In the late campaign we had a chance to better our condition as well as the condition of our fellow-men, but we did not accept it. We had for a leader one of the noblest men that ever stood on American soil. A man who started out against the shyllocks of the gold standard to fight for the cause of humanity and better the condition of the working people. You may now see his thanks. No matter how good the chances of the working-men may be, they will cut their own throats every time, and the better their chance the deeper the cut. It was the duty of every workingman to cast his vote for that noble hero, W. J. Bryan, a man whose character is above reproach. The goldbugs could dig up nothing in his past life but honesty in all his transactions. W. J. Bryan is a noble specimen of humanity. He neither smokes, chews tobacco, nor drinks, and is a member of the Christian church. He manfully declined an offer of \$25,000 a year from Siegle, Cooper & Co., of New York, to manage the law department in their great store, stating that he wanted to give as much time as possible to the silver cause for the next four years. The fight is still on, and I hope during the next four years the working people will study this question, so they may vote intelligently

in 1900, with W. J. Bryan as our leader. Free silver must come.

I cannot see how a man working for his living could vote for such a contemptible shyllock as Mark Hanna, who has broken up every union among his employees. Also Payne, one of the greatest labor crushers in America. Think of the Milwaukee strike, with Payne at its head. The poor men are now blacklisted; they and their families are suffering and can't find employment. Think what you are doing to your fellow-men by voting for such men, or in the interest of such men. There is a foreign element in this country that is a curse to the American nation. They came here because they could not live under a gold standard in their own country. Now they try to force it on us and themselves in this country. Such people ought to be loaded on a large vessel and set adrift on the high seas in a heavy gale, and I don't think the Creator would think enough of them to steer their ship in safety to the shore.

We have here in Chicago a paper called at one time the Chicago "Tribune," but three months prior to and since the election it has been called by some people the Chicago-London "Tribune," and seems to be controlled by Johnnie Hanna McKinley Bull. Here is what it said November 13: "Since election there have been employed over 200,000 men and women in factories that have opened up since the campaign, receiving on an average \$2.50 per day, and the country is now half a million dollars better off than it was two weeks ago." Such a bare-faced lie to publish! \$2.50 per day; men and women, on an average! I wonder if the "Tribune" thinks it is talking to Indians, Hindoos or American citizens. I think the man who wrote the article is an Indian or a fool. The latter, I think. They do not state that most of those men they have put to work are men who, three days prior to the election, were laid off, being told that if McKinley was elected they could go to work the following Monday; if Bryan would be elected there would be no more work. In other words, laid them off to force them to vote for McKinley.

A. McF.
Chicago, Ill.

UNION NO. 17, DETROIT, MICH.

Another month has rolled by, and the boys of Detroit, "The City of the Straights," send a brotherly greeting to all good N. B. E. W. men. We wish you could all be here to attend our fifth annual ball, the date of which is set for January 9th, as we expect to have a grand time, for the affair is in the hands of the very best committee that could have been appointed, and they are hustling things into shape, regardless of the hard work involved.

Bro. Brandenburg and his "pard" of No. 75 took a trip through Kentucky and Tennessee, but as the "wave of prosperity" had not struck that region yet, they came back to old Michigan again, and are now working for the new telephone company.

Harry Hatton, one of our old members, has quit the electrical business, and has gone to Green Cave Springs, Florida, and bought an orange grove, where he will be more comfortable this winter

than climbing towers nearly two hundred feet high to trim lamps. He writes back that there is a great opening there for any man that has a few hundred dollars to put into fruit farming.

Bro. James Runkle has returned from Ann Arbor, where he was foreman of the wire construction for the new electric railway. Bro. Runkle would hire none but Union men on the job. That is the kind of unionism that counts.

The new Detroit Telephone Co. has been giving employment to a large number of men in the construction of their exchange. Tim Linahan, the foreman, is an old Brotherhood man.

I am happy to state that our big brother, W. C. Shuart, has about recovered his hearing. It would have been a sad affliction for a young man like him to have had to go through life deaf.

No. 17 held an open meeting and smoker recently, and it was a red letter event in our annals. We had addresses on unionism, music, both vocal and instrumental, orations and specialties of different kinds by the members, and after this "feast of reason, and flow of soul," we adjourned to Snyder's Cafe, where another kind of feast awaited us, to which we did ample justice. The result of the affair was a big list of applications for membership, and brotherly feeling has been intensified among the boys, and I will say that these social meetings are great promoters of interest in unions, and a grand way to increase the membership to such a point that almost anything that is asked of employers is granted readily.

Things are shaping themselves now, so that we expect before long to get an agreement with the public lighting commission to hire none but Union men. We guarantee to furnish competent men.

The report from headquarters at St. Louis was received, and we were pleased to hear of the increased number of Locals in the Brotherhood. Let the good work go on.

In conclusion, let me say to the brothers all over the country, whenever or wherever you are working, if there are any non-union men on the job, talk to them and show them the benefits they will derive by being backed by a good, strong Union, and not depend on their own puny efforts to right a wrong that is put upon them, or in demanding an increase in wages. Show them the very meanness of non-union men watching to grasp the advance in wages and better conditions secured by the indomitable will and noble efforts of Union men. Try and make these men appreciate the principles and the ties that bind together Union labor.

I have always noticed in my sojourning in different towns of this country that the most respectable and honest men belong to labor unions. A man does not have to be rich to be respectable and honest. For "many an honest heart beats 'neath a ragged vest," and I know that if great oppression ever comes upon the common people, the first to strike in their defense will be the brawny arms of Union workingmen.

DAN E. ELLSWORTH,
Press Secretary.

UNION NO. 22, OMAHA, NEB.

No. 22 is still moving along slowly. Business is very quiet at present. The Western Electric Supply Co. have just

finished the wiring of the County Poor Farm for about 400 lights.

Bro. Watters, while placing a converter on a pole October 2d, in some way slipped and fell about twenty feet, and the injuries received have prevented him from working for six or seven weeks, but he is now getting along very nicely. Bro. Watters also had the misfortune of losing his infant daughter during his injuries.

The light company here are putting in a new type converter in place of the old type they have had. Also have extended their line in the southwestern part of the city about two miles.

Should any of the brothers of No. 22 see this, we would like to hear how they are getting along, as we have not heard from some of them for some time.

We have changed our meeting nights from every Friday to the first and third Wednesdays, and meet in Labor Temple, Seventeenth and Douglas avenue.

M. J. CURRAN,
Press Secretary.

IN MEMORIAM.

Whereas, It has pleased the All-wise Creator, in His infinite wisdom, to take by death the beloved infant daughter of Mr. and Mrs. J. W. Watters; therefore be it

Resolved, That the members of N. B. E. W. of A., Local No. 22, of Omaha, tender our brother our sincere sympathy and condolence. Be it further

Resolved, That a copy of these resolutions be spread upon the minutes and published in the "Electrical Worker," and a copy be furnished our brother.

M. J. CURRAN,
MARK CASTER,
JACOB FOSTER,
Committee.

LOUISVILLE WILL TRY AGAIN.

I was sorry to hear of the death of Henry Miller, our first Grand President. I think he was always a faithful member of the Brotherhood.

I must say I am very thankful to our Grand President, Harry William Sherman, and also our Grand Secretary, J. T. Kelly. They have granted me a card as Deputy Organizer, and I am surely going to try to fill the office to the best of my ability. If I make a success of reorganizing Local No. 28, I am also going to try to organize New Albany, Ind. In regard to Louisville, the electrical workers say they have had three unions in Louisville, and never made a success of it, so I don't think our membership will be very large this time. I met John C. Diebel, an old member of Local No. 28, who has resigned from the electrical business. He was the only honest and faithful member that Local Union No. 28 has had. Calvin Beach has left. He tried to do all he could for the Brotherhood, but although members would come to meetings, they would not pay any dues. That is what has caused Local No. 28 to break up. But I hope it will make a better success this time.

GEO. A. PODELL.

UNION NO. 40, ST. JOSEPH, MO.

As I have just been appointed Press Secretary of No. 40, I will try, by request of the Local, to explain the condition of affairs here, and why No. 40 did not succeed in getting one of its members in as superintendent of the

city plant, as the boys did not think that the article in the "Worker" of October explained the facts as they were. It was not because we did not have a man with a good technical education. It was the political pull that W. C. Stuart had that secured for him the position of superintendent of the city plant. No. 40 did all she could to get a member in. Mr. Stuart's name was put three or four times before the Council and finally he got votes enough to confirm his appointment. As the matter of nominating the superintendent lay with the Electric Light Committee, we could not get them to put before the City Council the name of one of our members. We had half the Council in favor of our man, the other half being in favor of Mr. Stuart, so he received the plum, taking charge of the plant. Bro. Wm. Gorton has been for six or seven years repair man in the station, and had a kid furnished him by the city as helper. Bro. Gorton received for his services \$70 per month and the kid received \$20 per month. When Mr. Stuart took charge of the plant, Bro. Gorton asked for the position as engineer, which was given him at \$80 per month. Then the kid was given Bro. Gorton's place at \$40 per month. The kid is a non-union man, so in making this change, Mr. Stuart made the city a saving of \$60 per month, doing away with one man entirely. Then Stuart and the committee tried to do with one less trimmer, but the boys would not stand that, so he gave one trimmer half time trimming and then come into the station and clean up, thereby adding to the rest of the trimmers from five to ten lamps each, so you see Mr. Stuart, by making such changes, made the city quite a saving. All former superintendents of this plant did their duty without the aid of a typewriter, but the present superintendent has a lady typewriter furnished him by the city, so by doing away with the \$70 man, the typewriter, was added to the city plant circuit. I think No. 40 will come out all right yet, as we are adding new members to our circuit and getting along fine.

Bro. Bartlett, who has been sick a long time, is fast recovering and will soon be able to resume his duty as general foreman for the St. Joseph Light and Traction Co.

Bro. Dick Martin, superintendent of the Citizens' Tel. Co., is pushing things right along with a full union gang.

The Electric Construction Co. is doing a good business with Bro. Snodgrass in charge of the dynamo and motor business.

No. 40 is preparing to give her fifth annual ball New Year's Eve, which promises to be a grand success. The boys are hustling selling tickets.

Where is H. T. Sullivan, you spoke of sometime ago? Some of the members of No. 40 would like to see him personally, and also settle with the lodge for ball tickets from last year, as he is no longer a member of No. 40, being suspended long ago. Look out for him.

W. C. SNODGRASS,
Press Secretary.

UNION NO. 41, PHILADELPHIA, PA.

Being again called to duty as a suffering scribe, I make haste to write my final letter to the "Worker." An elec-

tion of officers will take place this month, and I will evidently have a successor in office, who will supply you with more interesting reading matter than I have done in the past six months. Yet I do not feel that I have not done my duty as a scribe after being cognizant of the fact that I have never yet failed to send a monthly report to the "Worker" from the local I represent, while I note that there are many scribes who do, for instance: In the October "Worker" there were eighty-one locals represented in the directory only. The number of correspondents being just the reverse, eighteen. In the November number there were seventy-nine represented in the directory, with only seventeen correspondents, not including the interesting writings of Bro. E. Colvin of No. 35; "Silver Hatt" and W. H. Kelly of No. 45. But there is some excuse for these three worthy correspondents, as they were evidently trying to find out just where Bryan had gone to so suddenly, or, in other words, "Did he fall or was he pushed?" I will say, further, that I think a reasonable fine should be imposed upon all press secretaries who fail to send in a monthly report to the "Worker." They have obligated themselves to fulfill the duties of their office faithfully, and why not prevail upon them to do so?

The movement in regard to our social organization is progressing under the personal supervision of Deputy Organizer, Bro. Geo. A. Neal.

Bro. Broadhurst is in good health again, and went to work last week.

We added a new light last week. Bro. Chas. E. Swaney was duly initiated. We also received a number of applications.

We also elected as an honorary member, our ex-president, and Bro. Chas. Russell, who was expelled from our local May 15, 1895. Mr. Russell has proven himself worthy of our consideration by his many actions towards the N. B. and its members since his expulsion. At the time he was expelled he was the president of our local, and was employed by the Cutter Electrical Co. as foreman. His competency in this position soon became noticeable to his employers, and he was decided upon as their superintending engineer. At the same time "Dame Rumor" had it carelessly distributed that our local was about to go out on a strike, which, however, was not true, and the stockholders were anxious to know just how Mr. Russell stood in case there was one, and though Mr. Cutter prevailed upon him to resign the presidency of our local, which he (after considering his position in jeopardy) at once proceeded to do, and from all I can understand, this was all he intended to do, merely resign the presidency and be an ordinary member only. He tendered his resignation May 8, 1895, but it was not accepted and a rising vote of thanks was given him for the good he had done the union, which he cordially accepted in a few well chosen words, in which he insisted that his resignation be accepted. Matters became well distributed during the ensuing week, and Mr. Russell was not at the next meeting (May 15, 1895), whereupon a motion, declaring his chair vacant, expelling him, and notifying him of the action taken, was unanimously carried. Since then Mr. Russell has proved himself to

be as good and even better than some of our members in advocating our cause. It is, and always was, a hard matter to get a job from "Charley" without having a paid up union card. If you were not "in" he would boldly tell you to invest your first week's salary and get "in." He has severed his connections with the Catter Co., and is superintending engineer for the Sawyer Co., which firm advocated his reinstatement in our local, and in consequence thereof he has been elected an honorary member this 26th day of November, 1896.

We are placing before the public a book containing the history of Locals No. 15 and 41, photographs of the officers of the same respectively, some very interesting reading matter pertaining to electricity in general use, the blank space being filled with advertising matter. Now, we have had a great deal of trouble with this book. Some of our oldest and brightest members have had their eyes opened with "foxy" tricks of the advertising trade, and we hereby tender a friendly warning to all locals who contemplate doing likewise, to first communicate with us, and receive free of charge brotherly advice of how to proceed with matters of this kind. The book is everything it could be expected to be, and has been duly edited by an editorial committee consisting of Bros. T. D. G. Smith, W. J. Donaldson, W. C. Fisher, W. W. Hollingsworth and L. Spencer. But, as I said before, we have had "troubles of our own" to get it so, and with a brotherly regard for all, we solicit consultation personally or by mail.

At a regular meeting held November 19, 1896, the following resolution was adopted:

Whereas, J. T. Kelly has always been a delegate to A. F. of L., and

Whereas, No benefit has been given to the N. B. E. W. of A., therefore, be it

Resolved, That Local No. 41 appeal to the Executive Board of the N. B. E. W. of A. to elect a delegate to the A. F. of L. by a popular vote of the unions.

GEO. A. NEAL,
JOHN R. ZAHN,
E. H. B. CHEW.

Business is picking up slowly, although there are yet quite a number of brothers out of work.

Bro. Inspector A. T. Maybrey has had the sad misfortune of burying his grandfather, and in consequence thereof has been absent from the last four meetings. Bro. "Al" is 16 c.p. full and his light is much missed when not in the circuit.

Entertaining the hope that you have all had a happy Thanksgiving Day, and offered up your thanks to Him who doeth and knoweth all things best, I wish you all a Merry Christmas and a Happy New Year. May you have many of them. I also hope that the "Worker," ably edited by our Grand Secretary, J. T. Kelly, will ever proceed in its grand triumph of enlightening the homes of the many brothers throughout the grand circuit.

D. S. LOCHER,
Press Secretary.

44'S BLOW-OUT.

Fitzhugh Hall has seen many strange and novel sights since its opening. It has been decorated for church fairs, for dances and for wrestling matches. Its rafters have resounded to the eloquence

of political speakers innumerable; they have re-echoed the soft strains of orchestras and often sent back the loud blare of brass bands.

But Rochester's big assembly hall never enclosed a more brilliant gathering, or ever sheltered finer decorations than were seen last night on the occasion of the fourth annual ball given by the National Brotherhood of Electrical Workers. The long hall was positively dazzling with the display of electric lights. There were novelties shown that had never been seen in this city before. It was stated that aggregate expense of the display ran over \$700; the money was well expended, so far as results are concerned.

The first sign of the art of the electrical workers was seen in the elaborate design over the entrance. As the populace walked up South Fitzhugh street last night, the huge sign stared pedestrians in the face. In large letters were displayed the initials of the order, "N. B. E. W.," worked in the flashing lights of dazzling white.

Within the hall was a kaleidoscopic scene. The masterpiece of the decorations was suspended above the stage, on the west side of the building. Pendant from the ceiling was a large circle, eight feet in diameter; the circumference of the wheel was dotted with mellow white lights. Within the circle were two American flags crossed, constructed of colored lights; beneath was the emblem, "L. U. 44, N. B. E. W." The letters of the emblem were composed of small white and red lights. Also within the circle was a huge hand, grasping a shaft of electric bolts, representing lightning. The coloring of the flags and the shaft within the hand was especially brilliant.

Above the circle was a large star, dotted with lights. The arch over the stage was hung with Chinese lanterns. It was stated that 370 electric lights were utilized in forming the circle and the star; the work was from an original design planned by W. A. Breese, chairman of the electrical committee that had the decorations in charge. As a work of electrical art it surpasses anything ever shown in Rochester.

Another conspicuous feature in the decorations was in the large Japanese umbrella pendant from the dome over the center of the room. Around the edges were red, white and blue lights, alternating. Four Chinese lanterns illumined by electricity were placed at the corners of the dome; similar lanterns appeared beneath the balcony.

Strung in festoons from one end of the large hall to the other were hundreds of "firefly" lamps. Like the light emitted by the fireflies, the light from these lamps was intermittent; faint at times, almost to the point of disappearance, then flashing out with brightness.

Over a thousand incandescent lights were used in the decorations of the entire hall. The electrical workers not only spared no expense, but they gave to the subject their best thought and best work, in order to insure that their decorations would surpass anything ever attempted here; they succeeded beyond all expectation.

In addition to the decorations of electric lights, there was an artistic drapery of flags and bunting. Handsome palms in pots graced the stage.

The doors were opened at 7 o'clock and it was not long before the hall began to fill. The affair had been widely advertised. Admittance was only upon invitation, and in consequence a better class of guests were present than is sometimes seen at such public dances. The costumes of the ladies were elaborate in some instances, while many of the men donned dress suits for the occasion.

Music was furnished by Malone's orchestra, and until long after midnight the merry dancers tripped the light fantastic toe to the lively strains of the orchestra's music. Waltz followed quadrille and lancers succeeded the schottische, while many of the new dances and combinations of dances were on the long programme. In all there were thirty numbers on the list.—Rochester Herald.

UNION NO. 45, BUFFALO, N. Y.

The funeral of Bro. Daniel Ryan, who died last Saturday at the Sisters' Hospital from hemorrhage of the jaw, resulting from the extraction of a tooth, was held from St. Patrick's Church on the morning of Nov. 17th.

The church was crowded with the sorrowing friends of the afflicted family. The deceased was very popular. He was an active member of the Brotherhood, and was honored and respected by all who knew him. The members of Local No. 45 attended the funeral in a body.

Rev. Father Seeger celebrated the Mass and preached the funeral sermon. He paid a very worthy compliment to our deceased brother, and spoke words of comfort to his sorrowing friends and relatives.

In addition to his abilities as an electrician, Bro. Ryan was a first-class steam engineer, having served in the English and American navies, as well as the merchant marine, for many years. He was 37 years of age. The pall-bearers were Bros. Wm. Haley, Albert Cunningham, Fred Plogsterth, Harry Ferguson, John Fassett and Frank Marion.

The following resolutions were passed at a special meeting of No. 45, a copy having been sent to the family of Bro. Ryan, which consists of a widow and four small children:

"Resolved, That in the hour of your bereavement we extend to you our heartfelt sympathy for the loss of a good husband and father, and our loss of a brother who was beloved and admired by all who knew him.

"Resolved, That our charter be draped in mourning and so kept for the period of thirty days.

"Resolved, That we attend the funeral in a body.

"Resolved, That a copy of the foregoing resolutions be sent to the family of our late brother, also a copy be placed on file in the books of this Local."

The Postal has been putting down about two miles of underground to connect their most important city offices with the main office, and for use of call circuits. This has been badly needed for some time. It can be said of the Postal that what they do they do well, and this job will compare favorably with anything of its kind in the country.

As most of our readers have learned from the daily papers, 1,000 horse-power from the Niagara Falls power plant is being delivered to the Buffalo Railway Co. and used to operate several of their lines. It was a success from the start.

Many electrical workers have flocked here, believing that this power would be put to other purposes, and found they had lost time and money. If they will read my letters to the "Worker," and believe them, they will not be deceived. All electrical work has been shut down until next spring.

I am very sorry to see that Bro. Locher of No. 41 feels aggrieved at the language I used in a former letter, and states that I have gone so far as to call him a "sucker." Now I wish to say that the brother has evidently scanned over that letter hastily, instead of reading it intelligently and digesting the subject in a proper way. My object in referring to Bro. Locher personally was due to the fact that I am opposed to having politics brought into discussion through letters from Press Secretaries. As I understand my duties, we are to confine ourselves to such gossip as interests the brethren in electrical science, and the Brotherhood; not to create dissensions and discord, but to foster harmony and unity, irrespective of race, creed or politics. Bro. Locher's strictures on Wm. J. Bryan were made in a sneering, slighting manner, and I, in taking exceptions to them, stated that "we had heard of paid emissaries among the railroad brotherhoods, and asked if Bro. Locher was sucking the Republican teat," meaning to ask him if he was getting paid from the campaign fund for introducing his political harangues to us through the "Worker." I stated then, as I state now, in reply to the query in his last letter, that I am not satisfied as to his competency to judge whether it is for the best interests of the electrical workers or any other workers that Maj. McKinley should be President. It is a well-known fact that Maj. McKinley received the support of all the capitalists, bankers, trusts and corporations, while Mr. Bryan had little or no support from the so-called silver trust, his expenses being almost wholly defrayed by subscriptions in the towns and cities in which he spoke. Mr. Bryan is fresh from the people. He has never been contaminated by political hacks and wire-pullers in Congress, nor has his associates been ward heelers and thugs at home. His hands and voice are at the disposal of workmen; his every speech has been in their behalf, and to their shame they have thrown him down and walked under the banner that they have hissed and flung mud at for years—the banner of the trusts. I ask Bro. Locher, I ask every man who is a member of a trades union, why have you, a union, a brotherhood or an association, if it is not to protect your interests against trusts and individuals who would pauperize you to enrich themselves; and I ask you again, when you have a leader that is against these sharks and it is in your power, through your votes, to reach them by legislation, why you fail to take advantage of it. I ask you another question: Why is Wm. J. Bryan denounced as an anarchist? Because he criticizes the rulings of the United States Supreme Court on the income tax. Does Bro. Locher know that this body of eminent jurists passed this by but one majority? How about those who voted for its constitutionality? Are they anarchists? William J. Bryan had the manhood to say they were right, and the others were wrong. Does he call those in the majority anarchists? There are nine out of

ten Republicans in this city who have an income of less than \$4,000 per year, who will say the decision of this court was wrong. If wrong, how was it right from 1861 to 1865 to tax all salaries of \$100 per month or over? If it was wrong then, why should the government not refund, even at this late day, the tax so levied, waiving all statutes of limitation? But we hear nothing of that. Our common law is taken from English procedures. Are the large estates and incomes from other sources not taxed there? Of course they are, and in every European empire, kingdom or principality. It is exacted as promptly as the Turkish or Mormon tithe tax on the farmers' crops. How is it that one of the largest iron-mongers in the United States, or, for that matter, in the world, can amass a fortune of \$30,000,000 in thirty years? Simply because he is protected in that industry by the government, to the detriment of the people who are obliged to patronize him. Is it not just, then, that after that industry has been so fostered that it sells its products to all the nations of the earth, that its proprietor should pay back a certain amount to the government, and thereby lessen the taxes of others not so fortunate as himself? If such belief makes men anarchists, put me down on the list.

Now, let Bro. Locher read this letter, and if he has any other reason for calling Mr. Bryan an anarchist, let's hear what it is. He can still retain his right "as a free-born American to speak according to the dictates of his own conscience," although I never knew the law to give him that license, but he should state more clearly his grounds for belief in the points he takes up. He advocates McKinleyism as the cure-all for hard times, but fails to give the formula. He speaks of the national honor being vindicated. When have we lost it? That revolution is rebuked. We haven't had one since 1865. That mob law will not be tolerated. When was it tolerated outside of Western frontier, and then in the early days? As to Mr. Bryan's gem, "the cross of gold and crown of thorns," it should be illuminated and placed on the walls of the home of every workman, and taught to his children as one of the most beautiful things in the English language, and any man who takes exception to it is not a good member of the Electrical Workers.

Mr. Editor, I stop, as I have taken up too much of your valuable space. Were it not that the "cruel war is over," I should not have mentioned political matters again.

W. H. KELLY,
Press Secretary.

UNION NO. 48, FT. WAYNE, IND.

Local Union No. 48 is once more before you and with one more member, whom we took in at our last meeting. The union is getting small, as most of the boys have left town, and it is hard work to get new members. But there is a lot of good material to work on. We expect to get quite a number from the Wood Electric Light corporation. A good many of them seem to think that a union is to make trouble. They do not stop to think it is for their own good and advancement.

The Home Tel. and Tel. Co. has raised a large sum of money to increase their lines to 1,500 subscribers. They have about 1,200 now. They will put in more cables and lines.

Red Duncan, our Press Secretary, has left us. He was home for four weeks, but is now at Grand Haven, Mich., working as foreman for Green, of the Ft. Wayne Electric Light corporation, which is putting in a plant there. Jim McPhee is there, also. Luckenbill and some of the boys left for the South. We have not heard from any, but Luckenbill; as there was nothing South, he came back as far as Jasper, Ind., and is now working for the Electric Light Co. at \$2.25 for eight hours. There are but six men working in the gang, and three trouble shooters for the Home Tel. Co. here.

Inside work is awfully slack here, but it will pick up soon, as it is near the holidays; at least, we hope so. There are four contractors here for inside work. Three of them agreed to sign a contract for wages, but the fourth would not, although he was the one that got the boys to draw up a contract, and then backed out. He was paying from \$1 to \$1.50 per day. The boys kicked for a raise; he said he would not pay any more unless there was an agreement among the contractors. He said they should draw up one in regard to wages, which we did, but would not sign it. So it was changed to suit him; that is, as he said it should be. It was for 22½ cents an hour, time and a half for overtime, and double time for Sundays. The other contractors agreed to abide by it. When he found this out he tried to get the contractors together and cut wages, but did not succeed, as the other contractors would not have anything to do with him. The outcome was that he said he would have nothing to do with us, as the boys were trying to run his business, and tell him what to do. He was always crying "union" when he was working, and kicking about bosses and wages all the time, but did not belong to any, but was always ready to accept any raise in wages that they would make, but since Mr. Edmunds is in business it is different. Mr. Hattersley pays good wages, and also Mr. Chas. Gagerlehner, who has union men working for him and is in favor of the union. His place of business is at 26 East Berry street, and he will do nothing but first-class work. We hope those that are in favor of a union and want good work will give him a call.

Fred Traver, an inside wireman for the Home Tel. Co., tried to leave town last Thursday night without paying his board bill. He sent his wife on ahead and then went to the depot to go also, but his landlord happened to be there also. He collared him and took him down Stinton street a little way, and told him to pay his board bill, which was \$22.50, or he would take it out of his hide. Mr. Traver weakened and paid him his \$22.50, but there are others mourning for him, as he tried to beat everybody. He belonged to our local, but we dropped him, and are sorry we took him in. We hope he will not be recognized as a union man, as such men do the union more harm than good. He is about five feet four or five inches, slim, dark hair and sandy mustache, and is all wind. He can be recognized by his gait.

We will close for this time, hoping this will meet the approval of the boys, as it is our first letter, and we are new at it.

ALLISON AND BARTELL.

UNION NO. 49.

Bloomington, Ill.

It has been some time since No. 49 has been heard from. The reason is simple. There is nothing to write about very often, but it happens that this month something occurred worth writing about, namely, our fourth annual ball and electrical display. The following, taken from the morning paper, is a good description:

"The fourth annual ball of Electrical Workers' Union, No. 49, at Turner Hall last night furnished the most notable display of electric lighting ever seen in this city. It was a credit to the gentlemen who planned it, and would be a work of which many a larger city might well be proud. The big hall was aflame with all colored lights shining from varied shaped and all sized lamps. Suspended from the chandelier was a huge hoop composed of fifty-five 16-candle power incandescents, and from the same point to the four corners of the hall were strung ropes of evergreen studded with varied colored lamps. The entire stage was occupied with electrical displays. In the middle of the front was a miniature circular track about three and a half feet in diameter on which ran a small street car. Surrounding it and set on a frame erected in the rear were a score of lights and bells of all sizes and tones. At intervals these rang like chimes, producing a pretty effect intermingled with the orchestra music. On each side of this was a motor with a big fan illuminated with red, white and blue lights, the two whirling in opposite directions. On the extreme left side was a gorgeously lighted long-distance telephone stand and instrument. By means of this the sounds of the music and voices were heard in all the Southern and Eastern cities with which connection could be gotten. On the right side was a pretty display of the Home Telephone Company. In the rear center was a high stand on which was a huge bunch of lillies of the valley made entirely of lights which were operated by a revolving switch, causing each light to go out in order and relight again in its turn. A high pole with red, white and blue lights representing the steps and insulators on the cross beams was operated by a similar switch. Here the lights climbed up and down the pole and out onto the beams. On top was an illuminated revolving fan. The other piece was a Holland windmill. This display was nearly twenty feet high. The four blades of the mill were almost solid with colored lights, most of them small in size. The mill was turned by a concealed motor. Altogether 400 lights were used in the hall. In this fairy-like place a hundred couples danced to the music of DeMolay orchestra, stationed on a platform erected in one corner of the hall. The front page of the programme was embossed with the head of Franklin and inscribed with, "The Nestor of Wizards, Franklin." There were twenty dances, with lunch at intermission.

In comparing notes on our dance this year and the year before, I find that Bro. John Lemons did not sell a ticket either year, and he is the only one out of twenty-one members who did not, while the others sold from two to twenty-five each, Bro. Witty selling, I believe, more than twenty-five. We have made a hit with our electrical display, and have rented three of them to merchants of this city,

so that we will be repaid in a measure for many nights of hard work.

I will make no special mention of any display except the Holland Mill, made by Bro. Geo. W. Butler, which is a magnificent piece of work, and Bro. Butler is to be commended for this work, as he is not an active member of No. 49, since attaching himself to the city fire department. He made the mill "between two fires." We have fires every two months regularly. See?

Through the kindness of the superintendents of the electric light companies, Mr. McKenzie and Mr. Parrott, we received plenty of "electric currents" free of charge for our ball.

Although it has been some time since what follows occurred, I will report it, as it may protect some fellow-unionist from being robbed:

I had working for me a fellow who gave his name as Ed. J. Andrews, and his home as Milwaukee, Wis. He was not a Union man, but as I needed a man and there was no other available, I hired him, hoping to make a Union man of him. I had to make a trip out of town for a couple of days, and when I returned, Andrews was gone, after having borrowed all the money he could from my friends, and stolen all he could that belonged to me, including an umbrella, some electrical books, and in fact anything he could carry handily. So any of the boys that may meet him be prepared for him as he is a smooth "guy" apparently. He is about five feet ten inches in height, weight 170, and has a very "red" face and one of those "hooked noses" like a parrot. Any brother who knows of his whereabouts will confer a favor by communicating with me.

E. E. HIGGINS, Press Sec'y.

UNION NO. 52, DAVENPORT, IA.

To all local unions of the N. B. E. W. a Merry Christmas and a Happy New Year is our greeting on our first appearance in the "Worker." We were organized on October 13 with thirteen members, by Bro. Hayes, and it was up hill work for awhile, as most of our members are local men and have never had much to do with unions, and were a little shy at first, as to what would be expected of them as members. Some are old union men and some hail from places where there were unions. They, as a rule, were very much in favor of the move, and now that we have organized, everyone is with us, and I think at no distant day we will have a strictly union city or cities, for we take in the three towns, viz.: Davenport, Rock Island and Moline. We now have 22 members enrolled and several applications in for consideration, and things are looking bright; very bright, indeed, considering the times. Last night was our first night for December, and one of the members came up and inquired when dues were due, and on being informed "right away," why it took three of the brothers to handle the cash, the financial secretary included, who, by the way, is a little slow, but he can't help it. Can you, Jack?

Work here is very scarce, indeed, but now that Mark Hanna's pet is bought into office to pay a hundred thousand dollar debt, we hope to see everyone at work shortly. Even "Weary Willie" must be put to work making little rocks

out of big ones, and I hope we will have gold "to burn," so the "bloated old bond holders" and "coupon cutters" can get another crack at poor old Uncle Sam's safe. I'll quit before someone calls time.

I see by the "Worker" that St. Louis is about to make a blunder something like our virtuous and saintly city of Davenport made. It gave the lighting contract to a concern (guess that's what you would call it), anyway, some gentlemen who call themselves Walsh Bros., to light, heat, gas and bleed the city for 25 years. Oh, our city fathers are wise men, nit. Why they have made their names immortal; yea, inscribed in marble and placed on high in that temple of righteousness—the City Hall, but Sodom and Gomorrah won't be in it with them on that day (election day).

The Walsh brothers, of much fame, made such beautiful promises; the men they would put to work; the wages they would pay; the fine work they would do. Why it was wonderful the way they were going to spend some two or three hundred thousand dollars. They would show the natives how to do things up brown, and they did them up brown. They even paid (now listen) linemen the sum of \$1.50 per day. Now, wasn't that nice? Lovely. They didn't do a thing but hire Davenport men, when they couldn't import any more relatives or other rats or scabs. They laid miles of gas mains, but where, only the city fathers can tell. Just ask them about it. Yes, they paid those fines for every night the new lights weren't burning after June 1, nit. They had a drag. The lights will be in shortly before Christmas, but you must not mention that. You might get in trouble. Oh, the consolidated Walsh Bros. have fixed Davenport, but we know how. If I am re-elected I'll tell you some more, brothers.

We have a City Inspector, a very competent man, but he is handicapped, and can't do a thing without consent of a certain board, and they are all right—for some people.

The long distance, "the far away," as they are styled here, are going through here and are doing some nice work.

Brothers, I am thinking of starting a little paper of my own, but guess I will let the "Worker" print this edition, so will close, and may be you will hear from me again, and if not you will surely hear from my successor, and, now, wishing you many happy returns, and hoping you will all say "success to No. 52," I will close until next issue.

J. H. CLARK,
Press Secretary.

P. S.—Any brother or brothers who know anything of the whereabouts of one James Toomey will confer a favor on some of No. 52's members by informing No. 52, either through this paper, or through J. H. Clark, recording secretary, 215 Iowa street, Davenport, Ia.

UNION NO. 65, BUTTE, MONT.

I wish to state for the benefit of the electrical workers, that we have organized a union in this city that is a hummer. We met Sunday, November 29, and elected our permanent officers, and we have a fine lot of fellows, just the kind of backbone a union needs. In the election of officers there was not even a swinging or short circuit of any description. The new machine worked just as

smoothly as if it had been running for years. Each officer was nominated without opposition and elected by acclamation. Bro. Vic Poissant is our president. He is working for the Montana Electric Co., and is a fine little fellow and will make a switchboard that we can all work from. Bro. Frank Kerr was elected vice president. He is working for the General Electric Co. We could not have picked a better manikin to attach to the switchboard than he. Bro. D. J. Winslow is our recording secretary. He is doing inside work for the Montana Electric Co. He is a good fellow, and I am sure will make a segment to the commutator that the machine will be proud of. Bro. A. G. Ellerick is our financial secretary. He is working for the Montana Electric Co. He is all right and will make a voltmeter for the switchboard that will tell us how high our voltage is in monthly dues. Your humble servant is press secretary, and I must say I am proud of my position, as I think we have a union that any city can feel proud of. I am at present taking care of the fire alarm for the city. Bro. E. M. Barrett got the treasurership. He is working in the repair shop for the Montana Electric Co. It was a good choice, and the right man in the right place. Bro. M. M. Graham is our inspector. He is all right without a doubt, especially with the ladies. He works for the Montana Electric Co. Bro. Nels Swanson is our foreman. Now he holds two foremanships. One for the General Electric and one for us. Well, if you only knew him you would say as I do, that he is big enough to be a foreman above. Nels is a good man, and is well liked here. Our Board of Trustees is the best. Their names are, Bros. F. M. Kerr, Chas. Diehl, W. W. Talbott. Bro. Talbott is working for the Anaconda Co. He has charge of everything electrical around the mines. Bro. Diehl is foreman for the W. U. Tel. Co. He is well liked in Montana.

We have a membership of twenty for a starter, and as many more that will come in later, that did not know we were organizing. We know that Anaconda will fall in line, and we would like to see them, as there are a good lot of boys down there. Ed DeMars has charge of the power plant there. Ed is very well liked out here by everybody. Mike Sullivan is foreman at the smelters at Anaconda, and is a good man for the place, and is a favorite with everybody. I think Helena will have a union, and Great Falls, too. We would like to see them all fall in line. It is our only salvation. We must protect our craft if we would live, and what is more, union creates a friendship among electrical workers that otherwise would not be. I thought I knew pretty nearly everybody around here until we organized.

Any town that wants a union in Montana will find an organizer over here in Butte. Fred Ellerick is the man. He says he will walk to any town if they just let him know. We have the greatest union city in America, and if any of the cities in Montana have any doubt of a union being a good thing, let them look at the difference in wages between their city and Butte.

GEORGE KESSLER AITKEN,
Press Secretary.

UNION NO. 66, HOUSTON, TEX.

It is again time to report No. 66 to the "Worker." I think every local in the brotherhood ought to be represented in the "Worker" every month, if only to stand up and be counted. No doubt never a month passes that some one does not look over the correspondence pages of the "Worker" for something from each local, and if they fail to find anything they are disappointed. It always leaves the impression that something is wrong, or, at least, that there is not much interest taken in the order in those locals that are not represented. If there is nothing else to write except that the good work is going on, it would give the brothers an impression of the stability of the order, and encourage others to say something. Never was there a time in the history of organized labor when there was greater need of more thorough organization or when there was more to be gained by organization among the working classes of this country than the present. We have just had a crushing illustration of how the organized capital of the country could successfully defeat the disorganized and scattered forces of the working and producing classes in their desperate struggle for the betterment of their condition, and a more equitable share of the wealth they produce. We have been impressed with the great need of a closer alliance with one another and a more determined and united effort to overthrow the organized forces of the trusts and monopolies that are growing richer and more powerful every year at the expense of the workers of this country. Let the electrical workers get better organized, and put forth every effort to help along the great fight that is going on, and must continue to go on until there is relief for the industrial classes of this country. There is no question that the different labor organizations of the country are the great power that hold up the principles of liberty and justice in this Government, and if the tools of the corporations ever succeed in breaking up the labor unions in this country, good-by to liberty and freedom.

No. 66 continues in a flourishing condition. We are not getting in many new members for the reason that we have nearly all the material used up, but the old members seem to take interest and attend meetings tolerably well.

We are going to give a dance on the 8th of December, which promises to be an enjoyable affair.

Your correspondent has set a good example to the other members of No. 66 by taking unto himself a wife on November 3, but that doesn't prevent him from attending meetings regularly, but she only lets me off one night in the week.

Bros. Graham of San Antonio and Whitfield of Galveston visited our local this week. Bro. Whitfield deposited his card with us, and will become a member of this local.

W. V. FISK,
Press Secretary.

UNION NO. 67, QUINCY, ILL.

Here we are again, a little late, but we would not have been late had we not waited for news that did not reach us. December 1st comes with fine weather, which the electrical workers all like, and

especially trimmers, of whom there are several in Quincy.

I am informed that Bro. Perkins floated down the river in his little red canoe. Look out, "Ell," ice bergs follow closely behind you.

Bro. A. B. Otis has gone to Arkansas for the winter, but, boys, it isn't so cold in Quincy yet, and we are going to warm up this part of God's footstool with our annual ball on January 21st, which we are going to make one of the largest and best lighted dances of the season. With the committee we have in charge, our success is assured, both socially and financially. We expect to have a crowded house and electric lights till you can't rest. We will have something in the way of emblems and designs of different kinds, and many things to please the boys and girls also.

Ex-Bro. Frank Kendall had a very narrow escape from being killed outright. A telephone pole broke with him, breaking his arm and some ribs, and came near breaking his skull. He was recently suspended for non-payment of dues. Too bad he hadn't kept his dues paid up. He could have drawn a sick benefit, which comes very handy to a man of family. (We know whereof we speak.)

One of the engineers at the T. H. Electric Light and Power Co.'s station had his arm broken December 4th. He is not in the Brotherhood. Too bad, too bad!

I won't leave the switch on long this time. I can't tell you more of our grand ball, for the arrangements are not as yet completed, and we don't know just how liberal the two companies will be with us, but of course we have nothing to fear in that line.

There is too much wrangling among inside wiremen here. Pull together, boys, and you will all fare much better.

Well, our campaign is near at hand, and we contemplate several changes; Press Secretary one of them. However, we will tell you all about it in our next letter. Will open the circuit for the president, so vive vale. C. H. McNEMEE,
Press Sec'y.

UNION NO. 69, DALLAS, TEX.

Last month, having more work than I could attend to, I failed to do my duty as Press Secretary. I am sorry that some of our brothers who have not been overtaxed with that great blessing, did not help me out, but we cannot expect much from a brother who is doing all he can to keep the wolf from the door, and no prospect for the future to cheer him up.

Bros. Courtney and Burke had to leave us for greener pastures, which I hope they have found and are enjoying the blessings thereof. We were very sorry to have Bro. Courtney leave us. He is now in Eddy, New Mexico, running a plant.

Our local has had a hard fight, but I believe inside of one year we will have every worker with us to a man. All labor organizations must affiliate with one another, work and assist each other, so that we may become as one solid body, working in harmony with every branch of labor. One branch of labor can do but little without the combined assistance of all other labor organizations.

The Postal Telegraph has secured right-of-way between Houston and New

Orleans. Work is expected to open up at once.

Dallas, since the election, has been very quiet, and it looks very gloomy to the man who is looking for better times in the near future. There are too many people walking the streets begging for something to eat, for a man to say that times are getting better. Will keep the boys posted when there is work in sight.

CHAS. TROTTER.

GALVESTON, TEX.—Editor "Electrical Worker." Having noticed in the "Electrical Worker" of November the following: "If Bro. Geo. D. Crossley is anywhere in existence, the members of No. 60 would like to hear from him, as the boys think he is dead, or gone astray." Well, we, a special committee appointed by Local No. 71 of Galveston, would like to let all sister Unions and Union men know what kind of material Bro. Geo. Crossley, and also A. H. Stelle and M. J. Flynn are, and also to express our contempt for such alleged Union men as they. Their offense is coming to a Union town, such as Galveston is cracked up to be, where all building trades unions are affiliated, and building laborers receive \$2 per day, and after going up to Houston informing them at their meeting what the hours and scale of wages were in Galveston—35 cts. per hour, and eight hours to constitute a day's work—came here and worked for \$1.50 and \$2 per day, and without a doubt would have worked ten hours a day if they could; and worst of all, the building was a new brewery, the owner of which did not want any trouble with labor unions, and specially specified that all men employed on the building should be strictly union. These fellows got on with their dirty work until a new man struck town, and found out that wages in Galveston were \$2.80 per day. He was paid off at the rate of \$2 per day, having shipped in Houston with the firm of Barden & Sheets for that figure, they telling him that that was the scale of wages in Galveston. This man's statement, and he told us he had seen the pay-roll, and the wages opposite those men's names, which was \$1.50 and \$2, and Mr. Sheets' statement to our committee that he had only paid them as before mentioned. Well, this worked us up, and had we found it out in time we would have had the walking delegate take their cards away from them, but those fellows from Houston had got in their dirty work and gone when we found it out, the building being almost finished. No wonder no one from Galveston was hired on that job. Now, brother members and Press Secretaries, we would like to have your views on this matter. People 'o come to a neighboring town where they could get more wages than where they came from, and work for \$1.50 and \$2 per day, while the common laborer on the same building was getting \$2 for eight hours' work per day. We have preferred charges against them, but they are out of our city and can't be heard from, and we have since learned that one of them, M. J. Flynn, while doing some work in the Capitol Hotel in Houston, stole a diamond pin, and the only reason he was not prosecuted was that the party did not want to stop over to prosecute him, being satisfied to have the pin returned.

We have no direct proof, but have learned from several people that the

Hon. O. P. Wood and Richard Murray did not get union wages while working here this summer on the Tremont Hotel for L. E. Miller. They are invited to rise up and explain.

No. 71 had no unemployed members when all this happened, so they had nobody to fear if they kicked for higher wages. Well, we feel very sore about No. 66's members, and think they must have been a starved outfit and not used to decent wages.

After we had declared the firm of Barden & Sheets an unfair firm the Building Trades Assembly's Grievance Committee made them sign an agreement to live up to union rules in this town.

Well, as a marked contrast to all these "artists," we have had Bro. Sikes of No. 66, and Bro. Graham of No. 60 (San Antonio), working here, and we have found them perfect gentlemen and square union men. They have been working for Barden & Sheets since the settlement. Bro. Sikes left here on the 2nd to take a permanent job in Houston. Good luck to him.

F. J. SCHALLERT,
HENRY FARLEY,
G. N. MCCARTHY,
Committee.

UNION NO. 73, SPOKANE, WASH.

Our Press Secretary, having so much other business to attend to, seems to have neglected his duty as Press Secretary this month in not sending his letter to the "Worker." But there is one consolation, that any brother has the privilege of writing to the "Worker," so any brother who is sore at not seeing a letter in the "Worker" from his Local Union, all he has to do is to write one himself. It was a very sad disappointment to the boys, as they congregated around Bro. Cowan, who had brought his "Worker" to the storeroom to read it, to find that there was no letter from No. 73.

There was a new light added to our circuit last Wednesday night, in the person of B. Koontz, who stood the test manfully. In fact, he seemed to stand it too well to suit Bro. Ed Warner, who claimed there was something wrong, and right he was, because, upon investigating, he found two wienies concealed under Bro. Koontz's toes. Then Bro. Warner went on to explain in a very neat speech that it was an impossibility to get a contact where there was a wienie concealed, as they served as non-conductors. I guess Ed knows, because he boards at the same house.

All the boys are working here at present. Bros. Denter and Van Inwegen have gone into partnership in the electrical business.

There is talk of removing the City Electrician and if they do I think one of No. 73's members will be in the swim. Bro. Warner declares emphatically that if he is elected as Inspector he will never come into the lodgeroom without his hip-irons on, and will shoot the toes off any candidate who wriggles his toes in the future, so now, Mr. Editor, I will close, because I think I have given fair warning to all. From a

MEMBER OF 73.

UNION NO. 75, GRAND RAPIDS, MICH.

Well, boys, as I did not get around last month to get in my say, I will endeavor to make up for lost time. No. 75 is still up with the best of them, but as most of

the boys are out of town, of course it is not so lively as when we were all here together.

Electrical business is quite dull at the present time, but the Lowell electric light people expect to do considerable commercial lighting here in the near future, and as their lines will be lofty, it will make a great deal of work for the boys.

Our City Fathers are talking very strongly of putting in a new municipal lighting plant. I will be able to tell you more about it in my next letter.

The street railway company has been doing a good deal of work lately rebuilding and extending old lines.

The Fort Wayne people are putting in an electric light plant at Grand Haven of 80 arc lights, and some of our boys have gone down there to work.

We sincerely hope all electrical workers had as sumptuous a Thanksgiving dinner as we did here in Grand Rapids. Bro. Joe Aldridge is not at all selfish. He made a turkey sandwich for Bro. McIntyre that lasted him and his wife for three days.

No. 75 has moved into new quarters since our last letter. Our place of meeting is at the Central Labor Union Hall, and our meetings are held on the second and fourth Mondays of each month. We also elected Bro. Joe Aldridge vice president to fill vacancy caused by the resignation of Bro. J. C. Crowley, and Bert Clark foreman, to fill vacancy of Bro. Billy Brannenburger, who is now in the Sunny South. We would like to hear from any of the boys out of town, who are members of No. 75. Kindly address your letters to President Jerry McGorren, or Bro. Geo. Higgins, care Citizens' Telephone Co., as we are thinking of giving a ball soon, and if you cannot be with us, boys, we will send you a programme.

The members of No. 75 all join in sending our heartiest and best wishes to Bro. Phin. Armstrong and bride, especially "Little Jack McIntyre," and wish them long and prosperous wedded life.

As this will be the last letter of the old year, we all join in wishing all electrical workers a Merry Christmas and Happy New Year.

DOUBLE NELSON.

UNION NO. 78, SAGINAW, MICH.

At the close of the late very trying campaign, it seems almost impossible to find words that are not thoroughly exhausted with which to communicate the electrical affairs of this city's branch of the brotherhood. I am very sorry to write that No. 78 was recently on the brink of dissolution's abyss, and was brought back to its former prosperous condition only by the hard work of the loyal hearts which go to make up the union. It was, however, a valuable experience, and it taught the members that lack of enthusiasm in an undertaking is bound to work ruin. As it is now, we are on a firmer basis than ever, and we shall probably never have another instance of personal feeling entering our lodge room.

We are to have a grand electrical display in December, which will be followed by a ball, and the boys are hard at work getting things ready.

Work is steady and nearly all the boys are employed. GEO. S. CRABBE,
Press Secretary.

Directory of Local Unions.

(Secretaries will please furnish the necessary information to make this directory complete. Note that the time and place of meeting, the name of the President, the names and addresses of the Recording and Financial Secretaries are required.)

No. 1, St. Louis, Mo.—Meets every Tuesday at s. c. cor. 21st and Franklin avenue. F. P. Kinsley, Pres., 1801 Morgan st.; W. S. Peebles, R. S., 5147 Wells ave.; J. P. Casey, F. S., 2702 Spring av.

No. 2, Milwaukee, Wis.—Meets 1st and 3d Saturdays at n. w. cor. 3d and Prairie sts., 3d floor. M. J. Quirk, Pres., 87 27th st.; J. W. Peterson, R. S., 450 9th st.; Geo. Pochlman, F. S., 647 24½ st.

No. 3, Denver, Col.—E. L. Layne, Pres., 1011 19th st.; Geo. P. Manning, Sec., 1633 Lawrence st.

No. 4, New Orleans, La.—Meets 1st and 3d Tuesdays at Carondelet and Perdido sts. J. McGregor, Pres., 2111 Rousseau st.; C. M. Hale, R. S., 630 St. Mary st.; R. B. Joyce, F. S., 331 S. Bassin st.

No. 5, New York City, N. Y.—Meets every Thursday at 85 E. 4th st. John F. Bergen, Pres., 528 Henry st., Brooklyn; R. J. Baker, R. S., 98 Henry st., Brooklyn; M. E. Bergen, F. S., 515 Henry st., Brooklyn.

No. 6, San Francisco, Cal.—Meets 2nd and 4th Wednesdays at Forester's Hall, 20 Eddy st. D. Keefe, Pres., 318½ Clementina st.; R. P. Gale, R. S., 1004 Larkin st.; A. F. Irwin, F. S., 425 Geary st.

No. 7, Springfield, Mass.—Meets 1st and 3d Wednesdays at room 30, Theatre Bldg. Wm. Gregg, Pres., 138 Patton st.; Jos. McGilvray, R. S., 190 Chestnut st.; G. T. McGilvray, F. S., City Hotel.

No. 8, Toledo, O.—Meets every Tuesday at Friendship Hall, cor. Jefferson and Summit sts. P. Crowley, Pres., 512 Vance st.; Jas. Burns, R. S., 1218 Broadway; W. Welsh, F. S., 1907 Cherry st.

No. 9, Chicago, Ill.—Meets every Saturday at 184 E. Madison st. C. D. Hatt, Pres., 5930 State st.; L. Christenson, R. S., 1043 S. Irving ave.; C. W. Beach, F. S., 5931 Sangamon st.

No. 10, Indianapolis, Ind.—Meets 1st and 3rd Monday at 29½ W. Pearl st. John Berry, Pres., care of headquarters Fire Dept.; E. Bussele, R. S., 80 W. Ohio st.; E. C. Hartung, F. S., Rooms 5-7 Cyclorama Bldg.

No. 11, Terre Haute, Ind.—Meets 2d and 4th Tuesdays at 8th and Main sts. C. D. Updegraff, Pres., 529 S. Ninth st.; M. Davis, R. S., 918 N. 9th st.; W. H. Schaffer, F. S., 114 N. 14th st.

No. 12, Evansville, Ind.—Meets every Tuesday at cor. 3rd and Sycamore st. Harry Fisher, Pres., 200 Clark st.; A. L. Swanson, R. S., 1054 Water st.; A. N. Grant, F. S., 202 Clark st.

No. 14, Memphis, Tenn.—Chas. E. Blake, Pres., 70 Mulberry st.; J. A. Myles, Sec., 207 De Soto st.

No. 15, Philadelphia, Pa.—Meets every Tuesday at 711 Spring Garden st. E. G. Boyle, Pres., Penn. Farmers' Hotel, 3d and Callowhill sts.; E. Hennessey, R. S., 1518 French st.; Chas. T. Lang, F. S., 829 Race st.

No. 16, Lynn, Mass.—Meets at General Electric Band Room, 9½ South st. Jas. Robson, Pres., 46 W. Neptune st.; C. W. Perkins, R. S., 6 Allen's Court; E. J. Malloy, F. S., 85 Cottage st.

No. 17, Detroit, Mich.—Meets 1st and 3d Thursdays at Trades Council Hall, 224 Randolph st. T. H. Forbes, Pres., 1104 13th st.; F. Campbell, R. S., 405 Abbott st.; J. G. Forbes, F. S., 745 Milwaukee av. W.

No. 18, Kansas City, Mo.—Meets every Friday at 1015 Walnut st. C. H. Adams, Pres., 612 Wall st.; T. W. Curphy, R. S., 716 Delaware st.; J. H. Lynn, F. S., 1632 Jefferson st.

No. 19, Chicago, Ill.—Meets 1st and 3d Tuesdays at 6512 Cottage Grove av. F. Conklin, Pres., 7022 S. Chicago av.; T. J. Prendergast, R. S., 7119 S. Chicago av.; J. Drouim, F. S., 9258 Anthony av.

No. 21, Wheeling, W. Va.—Meets 1st and 3d Tuesdays at Trades Assembly Hall. H. F. Wyse, Pres., Box 111; C. L. Ullery, R. S., Box 111; W. J. Clark, F. S., McClure House.

No. 22, Omaha, Neb.—Meets every 1st and 3d Wednesdays at Labor Temple, 17th & Douglas st. J. W. Watters, Pres., 2211 Pierce st.; M. J. Curran, R. S., 1814 St. Mary's av.; M. T. Castor, F. S., 422 S. 18th st.

No. 23, St. Paul, Minn.—Meets 2d and 4th Fridays at Labor Hall, 3rd and Wabasha sts. Juo. O'Donnell, Pres., 4th and Wabasha sts.; Thos. O'Toole, R. S., 333 E. 6th st.; F. Volk, F. S., 175 W. 6th st.

No. 24, Minneapolis, Minn.—Meets 1st and 3d Wednesdays at 34 and 36 6th st. Geo. Heilig, Pres., 18 9th st.; L. R. Stevens, R. S., 18 Western av.; A. Aune, F. S., 3129 Longfellow av.

No. 25, Duluth, Minn.—Meets 2d and 4th Thursdays at room 6 Banning Bldg. J. D. Hayes, Pres., care of Crowley Elect. Co.; L. P. Runkle, R. S., 110 W. Superior st.; Jas. F. Owens, F. S., 414 E. 1st st.

No. 26, Washington, D. C.—Meets every Friday at 827 7th st. N. W. M. O. Spring, Pres., 478 Central Power Station; S. M. Wilder, R. S., 508 11th st. N. W.; R. F. Metzler, F. S., 509 11th st. N. W.

No. 27, Baltimore, Md.—Meets every Monday at Hall, cor. Fayette and Park avs. P. H. Wissinger, Pres., 741 W. Fayette st.; M. V. Wright, R. S., 1427 Asquith st.; F. H. Russell, F. S., 1408 Asquith st.

No. 28, Louisville, Ky.—Meets 1st and 3d Tuesdays at Beck Hall, 1st st. near Jefferson Calvin Beach, Pres., 1020 W. Market st.; Ed. Herpt, R. S., 607 Magnolia st.; Jno. C. Deibel, F. S., 418 13th st.

No. 29, Atlanta, Ga.—Meets every Sunday at 61½ Alabama st. Geo. Foster, Pres., 100 Walker st.; D. J. Kerr, R. S., 114 Richardson st.; Geo. Raymer, F. S., 121 Rhodes st.

No. 30, Cincinnati, O.—Meets 1st and 3d Mondays at 136 E. Court st. W. Williams, Pres., 26 Mitchell ave., Mt. Auburn; H. C. Genrich, R. S., 420 E. 5th st.; J. F. Harmuth, F. S., 2158 Vernon st., Clifton Heights.

No. 31, Jersey City, N. J.—Meets 2d and 4th Thursdays at 116 Newark av. Thos. Watson, Pres., 513 Jersey av.; F. J. Anderson, R. S., 228 Washington st.; T. L. Jones, F. S., 137 Grand st.

No. 32, Paterson, N. J.—Meets 1st and 3d Mondays at German Union Hall. J. F. Colvin, Pres., 963 Madison av.; Jos. Maher, R. S., 348 Grand st.; Paterson Heights, Paterson, N. J.; John Kane, F. S., 274 Hamilton av.

No. 33, Newark, N. J.—Meets every Monday evening at No. 58 Williams st. W. J. Curtis, Pres., 12 Beach st.; J. M. Eder, R. S., 180 Market st.; W. E. Rosseter, F. S., 175 Sherman av.

No. 34, Brooklyn, N. Y.—Meets 2d and 4th Fridays at Peters' Hall, 360 Fulton st. E. W. Latham, Pres., 151 Gates av.; G. M. Leggett, R. S., 281 Adelphi st.; G. C. Paine, F. S., 151 Gates av.

No. 35, Boston, Mass.—Meets every Wednesday at Well's Memorial Hall, 987 Washington st. M. Birmingham, Pres. Eastburn Terrace, Brighton; E. Colvin, R. S., 258 Lincoln st.; Ailston; R. H. Bradford, F. S., 6 Temple st.

No. 36, Sacramento, Cal.—Walter Ross, Pres., 1030 G st.; R. A. Fisk, R. S., 1324 3d st.; Gus. Flannigan, F. S., 911 L st.

No. 37, Hartford, Conn.—Meets 1st and 3d Fridays at Central Union Labor Hall, 11 Central Row. M. F. Owens, Pres., 63 Hawthorne st.; D. F. Cronin, R. S., 49 Windsor st.; C. E. Byrne, F. S., 16 John st.

No. 38, Cleveland, O.—Meets every Thursday at 393 Ontario st. P. P. Hovis, Pres., 944 Central ave.; Tom Wheeler, R. S., 378 Franklin av.; J. E. Suloff, F. S., 28 Norton st.

No. 39, Providence, R. I.—Meets 1st and 3d Mondays at Phoenix Bldg, 157 Westminster st. H. B. Kelly, Pres., 1950 Westminster st.; M. L. Carder, R. S., 40 Wilson st.; G. D. Higgins, F. S., 8 Carpenter st.

No. 40, St. Joseph, Mo.—Meets every Monday at north-west corner 8th and Locust sts. "Brock-aw's Hall." R. M. Martid, Pres., 1702 N. 3d st.; Wm. Dorsel, R. S., 1708 Calhoun st.; J. C. Schneider, F. S., 808 S. 5th st.

No. 41, Philadelphia, Pa.—Meets every Thursday at n. e. cor. 8th and Callowhill sts.; Geo. A. Neal, Pres., 3626 Wharton st.; E. H. B. Chew, R. S., 2953 N. 15th st.; W. C. Fisher, F. S., 2854 Park av.

No. 43, Syracuse, N. Y.—E. F. Lester, Pres., 133 Bassett st.; E. S. Downs, Sec., 301 E. Willow st.

No. 44, Rochester, N. Y.—J. C. Gueriot, Pres., 120 Campbell st.; H. W. Sherman, R. S., 1 Bauer pl.; Fred Fish, F. S., 123 State st.

No. 45, Buffalo, N. Y.—Meets 1st and 3d Saturdays at 512 Washington st. Frank Hopkins, Pres., 81 Swan st.; Chas. Guyton, R. S., 124 Swan av.; C. E. Stinson, F. S., 21 Terrace st.

No. 46, Reading, Pa.—Lucian Bowman, Pres.; Harry Weidner, R. S., 225 Pearl st.; W. S. Hoffman, F. S., 109 Peach st.

No. 48, Ft. Wayne, Ind.—Meets 1st and 3d Fridays at cor. of Main and Clinton sts. R. Bartel, Pres., Hotel Tremont; A. J. Lathouse, R. S., 65 Hoffman st.; G. B. Taylor, F. S., 31 Douglas av.

No. 49, Bloomington, Ill.—Meets 2d and 4th Mondays at Trades Assembly Hall. C. F. Snyder, Pres., Box 1015, W. C. Gorey, R. S., 409 S. Lee st.; W. F. Witty, F. S., 303 N. Gridley st.

No. 51, Scranton, Pa.—Jas. Harding, Pres., 601 Meridian st.; P. Campbell, R. S., 1210 Irving av.; Ruben Robins, F. S., 1223 Hampton st.

No. 52, Davenport, Ia.—Meets 1st and 3d Tuesday; A. L. Wheeler, Pres., Hotel Downs; J. H. Clark, Sec., 215 Iowa st.

No. 53, Harrisburg, Pa.—C. A. Swager, Pres., 115½ Market st.; Jas. Emminger, R. S., 25 N. 15th st.; C. Anderson, F. S., 46 Summit st.

No. 54, Peoria, Ill.—Meets 1st and 3rd Wednesdays at 301 Main st. H. Scheerer, Pres., 219 W. Jefferson st.; Harry Dunn, R. S., East Peoria; L. C. Crawley, F. S., 115 Washington st.

No. 57, Salt Lake City, Utah.—Meets 2d and 4th Wednesdays. R. Blayr, Pres., 224 W. 1st South st.; John Poland, R. S., 224 W. 1st South st.; E. Mill, F. S., 15 W. 1st South st.

No. 58, West Superior, Wis.—Meets 1st and 3rd Wednesdays at rooms 3 and 4 1602 3d st. R. F. Pfeiffer, Pres., Superior Water, Light & Power Co.; G. C. Hehl, R. S., 405 Hughitt av.; H. Burdette, F. S., 1819 Banks av.

No. 59, Paducah, Ky.—J. B. Eretts, Pres., No. 2 Engine House; W. S. Nelson, R. S., 220 S. 4th st.; W. A. Koeneman, F. S., 220 S. 4th st.

No. 60, San Antonio, Tex.—Meets 1st and 3d Saturdays, Meyers' Hall, Alamo Plaza. T. L. Rose, Pres., 215 Powder-house st.; E. Kuhlman, R. S., 222 Salina st.; C. A. Davis, F. S., 215 Travis st.

No. 61, Los Angeles, Cal.—Wm. Tubman, Pres. Station 2; Chas. Viall, R. S., Station 5; C. P. Loft-house, F. S., 746 San Julian st.

No. 62, Kalamazoo, Mich.—A. D. Ayres, Pres., 534 S. Burdick st.; L. Bellman, R. S., 540 Pine st.; G. E. Tift, F. S., 324 Sarah st.

No. 63, Tampa, Fla.—Theo. Glinn, Pres., Pt. Tampa City; W. F. Crofts, R. S., lock box 264; Arthur D. Henry, F. S., box 220.

No. 65, Butte, Mont.—Vic. Poissant, Pres., with Mont. Elect. Co.; D. J. Winslow, R. S., 103 E. Granite st.; A. G. Ellerick, F. S., General Del.

No. 66, Houston, Tex.—Meets every Monday J. W. Howard, Pres., 1713 Houston av.; S. T. Sikes, R. S., 808 McKee st.; F. A. Peters, F. S., 907 Preston av.

No. 67, Quincy, Ill.—Meets 2nd and 4th Mondays at Central Labor Union Hall; D. M. Mallinson, Pres., 1120 Vine st.; S. L. Pevehouse, R. S., 1413 Spring st.; W. F. Wagner, F. S., 641 Locust st.

No. 68, Little Rock, Ark.—C. J. Griffith, Pres., 15th and Rooker st.; G. W. Wilson, R. S., 826 Marshall st.; W. N. Drogdon, F. S., 1813 W. 3d st.

No. 69, Dallas, Tex.—Meets 1st and 3rd Saturday at Labor Hall. S. D. Claiborne, Pres., 141 San Jacinto st.; F. G. Montgomery, R. S., 190 Collins st.; Geo. Eagan, F. S., 107 S. Murphy st.

No. 70, Schenectady, N. Y.—Meets 2d and 4th Tuesdays at Trades Assembly Hall, cor. Centre and State sts. F. Jitzendorf, Pres., Crane st., Mt. Pleasant; Geo. Miller, R. S., 32 Ellis st.; J. D. Betting, F. S., 626 Villa road.

No. 71, Galveston, Tex.—Meets 2d and 4th Wednesdays. J. T. Payne, Pres., 1314 Centre st.; F. J. Schallert, R. S., 2514 Church st.; G. L. Garrett, F. S.

No. 72, Danville, Ill.—G. M. Gilton, Pres., 319 Franklin st.; Jas. Merritt, Sec., care of Am. Tel. & Tel. Co.

No. 73, Spokane, Wash.—Meets 1st and 3rd Thursdays at Oliver Hall, 336½ Riverside av. C. C. Van Inwegen, Pres., 1504 Boon av.; T. H. Dentler, R. S., box 635; Gus. Pagel, F. S., Box 635.

No. 74, Fall River, Mass.—Meets every Monday at cor. Main and Bedford sts. W. I. White, Pres., 59 Bowen st.; Jas. Murphy, R. S., 100 4th st.; Thos. Bailey, F. S., 135 Snell st.

No. 75, Grand Rapids, Mich.—Meets 1st and 3d Fridays. J. McGoran, Pres.; Ed. Cannon, R. S., Clarendon Hotel; Geo. Higgins, F. S., 63 Pleasant st.

No. 78, Saginaw, Mich.—Jas. Hodgins, Pres., 1309 James st.; Robt. Crawford, R. S., 145 Gage st.; Chas. Ross, F. S., P. O. box 225, E. S.

No. 79, Austin, Tex.—Meets every Thursday night at Maccabee Hall. J. L. Vorkauer, Pres., 1206 San Jacinto st.; Chas. J. Jackson, R. S., Mayor's office; B. Y. Lovejoy, F. S., 109-111 E. 7th st.

Charleston, S. C.—Work on electric railway was recently begun.

Washington, D. C.—The work of completing the electric line between this city and Baltimore was begun on December 1st.

Minneapolis, Minn.—The Gugler Electric Company has been awarded the contract for putting in an electric light plant in the Washburn Orphan Home.

Laurel, Pa.—A new electric lighting company has been organized and has bid for the city lighting at \$74 per lamp per year. The Edison Illuminating Company at present charges \$108.

Peoria, Ill.—The Glen Oak and Prospect Heights Street Railway Company has awarded the contract for the construction of its five miles of road to a Chicago company, the work to be completed in sixty days.

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
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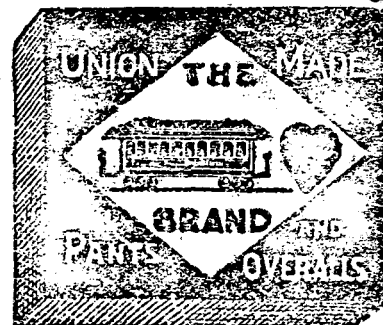
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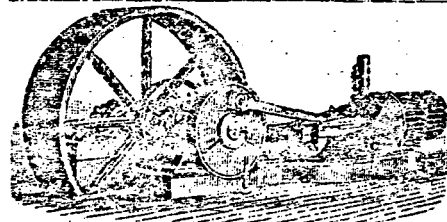
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